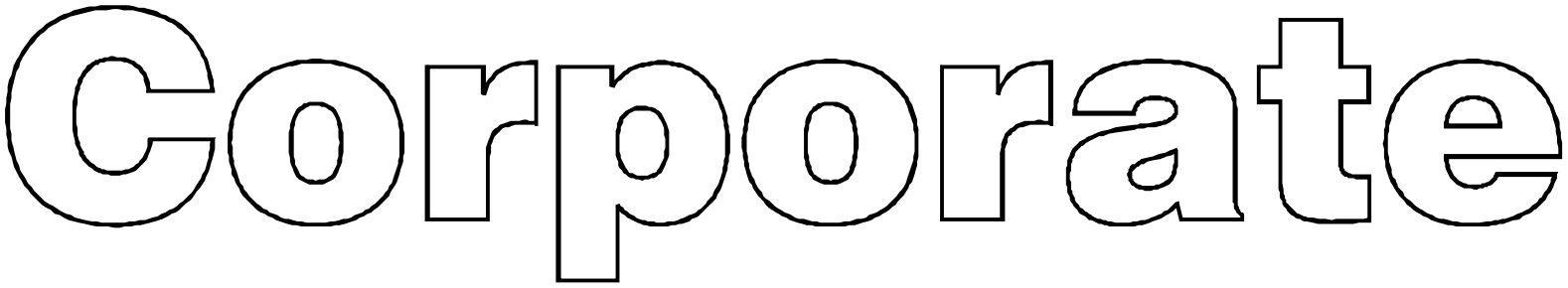
epeco.usa

Compendium 22

updated Aug. 2022

Contents


Corporate

Magdi el Beheiri, the co-founder

EPECO.USA, Inc., was incorporated in Nevada State/USA (1993), as anEPECO.USA, the Environmental Projects & Engineering company, incorporated (1993) in NEVADA State/USA to fulfill the up rising global demand for environmental protection projects. From the early beginning, EPECO.USA was engaged in the water and energy industries. EPECO.USA acquired EPECO, Environmental Projects & Engineering Co. (1992-Cairo/Egypt) to cover the Middle East & North Africa . EPECO.USA also incorporated EPECO.GULF (2007-Ras el Khaima/UAE) and WEPCO-Water Engineering & Projects Co. SAE (2017-Cairo).

In 2015, EPECO.USA extended its scope of work to Zero Waste Farming Technology and advanced Agronomics/Aquaculture projects.
It's obvious that Water, Energy, Advanced Agronomics & Zero Waste Farming Technology all comes under Environmental Projects & Engineering
..... EPECO.....From USA.

Technologies

Water

EP.ROWPU-Water Treatment Systems for Battle Field

EP.MBR - Domestic Wastewater Treatment & Recycling Systems

E.PURE Potable Water Treatment Systems for the most Demanding Areas

EP.DESAL Seawater Desalination Systems

Energy

EP.PV+WT-Combined Photovoltaic+Wind Turbine Energy Systems

EP.MEDI+ MUNI +HAZA- Medical, Municipal and Hazardous Waste Treatment & Incineration Systems

EP. W2E-Waste to Energy Systems

Environmental

Pollution Control & Monitoring

EPECO.USA, the Environmental Projects & Engineering Company, the core business is to support clients and legislators to clean up the legacy of the past, advising on environmental obligations and obligations and handling site assessments and clean-up.

EP ECO.USA expertise is extended to cover:

- Regulatory Compliance , Auditing & Accreditation.
- Environmental Data Management-Collection, Analysis and Reporting.
- Environmental Impact Assessment.
- Planning and Management of Environmental Projects.
- Design and Engineering of Environmental Protection Equipment and Systems.

LEED & Green Building

EPECO.USA is serving the internationally recognized green building program LEED-Leadership in Energy and Environmental Design . EPECO.USA provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. EPECO.USA's consulting services can be tailored specifically to meet customers needs and objectives.

EPECO.USA supports the entire family of LEED rating systems. EPECO.USA's extensive knowledge of the LEED process provides clients with valuable advice and smooth project implementation. Whether it is implementing LEED on a single building or an entire portfolio of buildings, there is no project too large or too small; EPECO.USA' goal is to help clients succeed at LEED.Our services include:

LEED Project Management
Visioning and Goal Setting for Projects
Building Assessment and Strategic Planning
Implementation of LEED Criteria
Certification Application Preparation and Review
Training USGBC (or equal) and AIA Education Provider.

HSEQ-Health Safety & Environment Quality Management

Heath, safety and environmental issues present significant risks to EPECO.USA– both to individual businesses, the company and the customers. To address these risks, EPECO.USA's has developed a global HSEQ-Health, Safety& Environment Quality Management Program, whereby all company businesses and customers are required to meet the same standard of practice. Tthe HSEQ Management Manual has been developed to meet the requirements of BS EN ISO 14001:2004, 9001:2000 and OHSAS 18001.

EIA-Environmental Impact Assessment

Assessment of Contamination in:

- Land/Soil.
- Waterways.
- Underground Water Aquifers.
- Water Lakes & Reservoirs.
- Air.
- Industrial Facilities.
- Power Plants.
- Oil Fields.

Agronomics

Zero Waste Farming

Zero waste Farming applies the principles of organic farming to minimize agricultural pollution as much as possible and maximize the use of available resources by creating a closed loop method for farming where nothing is wasted or contaminated.

Farms and agricultural facilities are natural candidates for Zero Waste Technology because most of their products are of an organic nature and they typically have the capability to harness one of the best Zero Waste Strategies available and use it on-site organic fertilizers and bio-fuel production.

By practicing Zero Waste Farming, the output of one process is the input of another via practices such as using sugar cane residues and rice straws in manufacturing wood chipboard. Agricultural and animal residues are commonly used, today for manufacturing organic fertilizers (compost) and bio-fuel.

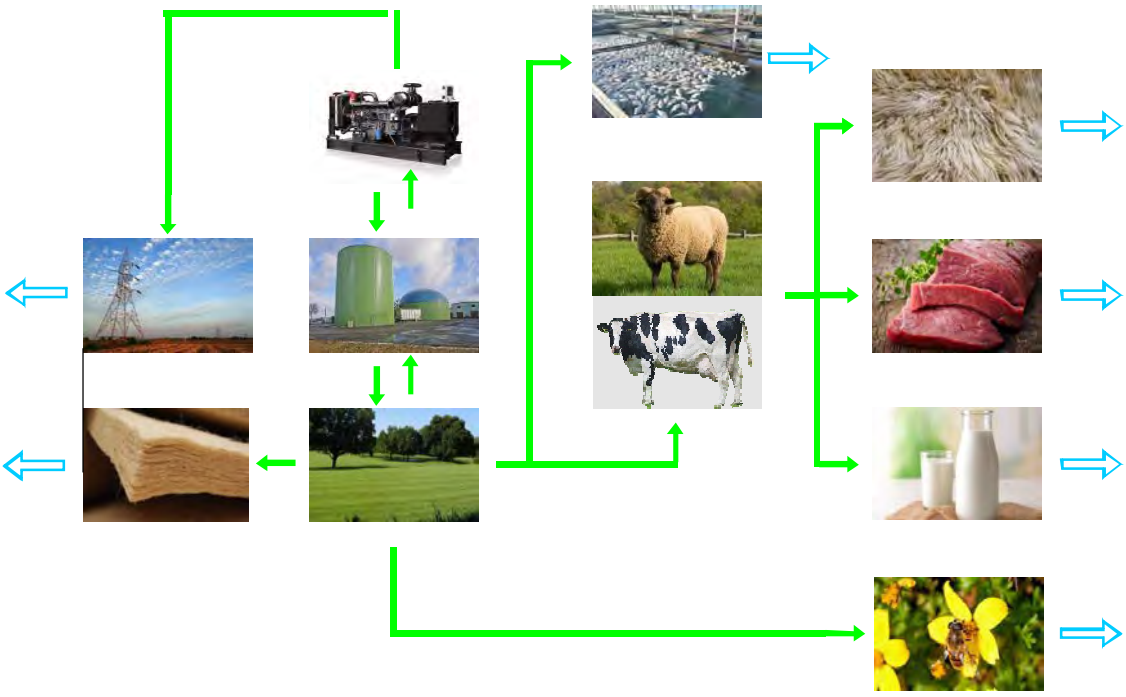
Zero Waste Farming Technology adopts the technology of converting all secondary outputs from agriculture, animal and fish production (animal manure, agricultural, fish and industrial waste) into organic feed, fertilizers and bio-fuel.

Zero Waste Farming Technology secures no harmful outputs and at the same time produces organic fertilizers, animal feed and bio-fuel from other than natural resources, which classifies the technology as an eco-friendly and sustainable water & energy process.

epeco.usa

Cattle and lamb are fed with green fodder consisting of farming green residues, panicum grass and cultured barely. Grazing cattle and lambs will be fed with fresh residues from paulownia, jojoba, moringa and spineless cactus trees.

Surplus green fodder will be dried and mixed with ground seeds of dates, olives, moringa and jojoba and will be introduced to the animals as dry fodder.



Residues of cattle and sheep are fed to the anaerobic digestor, which converts residues into organic fertilizer (compost) and bio-fuel gas.The bio-fuel gas is used in electric power generator or heating. Organic fertilizers are returned to farming operations.

Zero Waste Farming will deliver organic products: lamb and cattle-processed meat, diary products, spirulina algae, fish & shrimps, raw cow leather & lamb wool, flowers, olive oil, honey & jam, jojoba oil, moringa seeds and palm dates.

In some cases, the surplus electric energy will be transferred to the public electricity grid.

epeco.usa

Spirulina Algae Farming

The original Spirulina Algea cultivation farms consist of oval type shallow ponds each with an area of nearly 500 m^3 and 0.4 m depth. Ponds are built with limestone bricks and lined with polypropylene lining. Ponds are grouped in covered zones and covered with steel frame and transparent polypropylene sheets. Each pond is equipped with rotary surface accelerator to keep the water surface speed and direction under control. All hangers are equipped with evaporative cooling system for climate control. The original farms need wide land,

Products & Services

epeco.usa

WATER

epeco.usa

Desalination

epeco.usa

epeco.usa

water treatment for battle fields

EP.ROWPU

up to 272 cubic meters
.....(72’000 GPD) per day

www.epecousa.com

epeco.usa

EP.RO.S *series 500*

modular seawater desalination plants

up to 500 cubic meters/skid
.....(132’000 GPD) per day

epeco.usa

High Brackish Water
Reverse Osmosis Desalination Plants

EP.RO.B *h*

series 2000

Modular Skid/Frame Mounted

up to 2000 **m^3/day** ***per Skid***

Water Treatment

epeco.usa

epeco.usa

Potable Water Supply Systems for Rural Areas

e.pure




E.PURE, the autonomies, plug & play and versatile potable water treatment systems designed for the rural and most demanding areas.

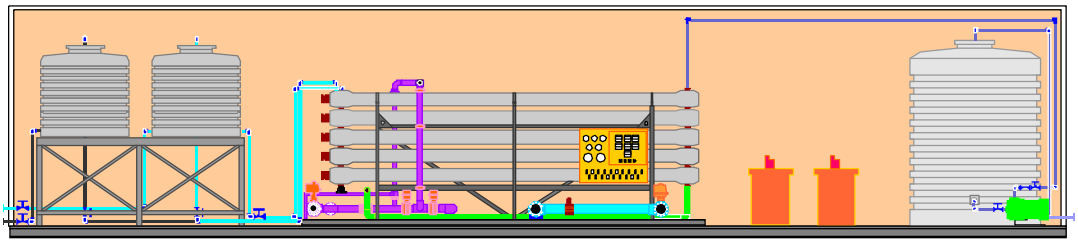
Bottled Drinking water purified by **E.PURE** can be sold in Egypt (as an example) for 25 EGP/m3. The buyers may order 20 liters jerkins of high purity water for less than ½ EGP. This price is far below the bottled water retail price.

Home use water purified by **E.PURE** can be sold in Egypt for 15 EGP/m3. The buyers may order 20 liters jerkins for less than 1/3 EGP. This is highly economical and competes the minimum available cost criteria,

E**.PURE** is an eco-friendly project. **E.PURE** plant uses minimum processing chemicals (more equal to or less than hygienic chemicals volume used by 2 households. No used chemicals are allowed to release directly or indirectly to the environment.

epeco.usa

e.pure



E.PURE is factory built, tested and delivered to site, ready, for commissioning and start-up test.

All **E.PURE** plants are built in standard ISO 20 or 40 Ft marine containers.

Due to the highly efficient physical process implemented in the **E.PURE** plant operation, minimum electric power consumption per unit product is achieved. This is a major energy saving criteria.

E.PURE plants are qualified to fit with photovoltaic PV electric power supply system, which supports the **E.PURE** sytstems green energy intentions.

E.PURE is available in (6) models, EP 1k, EP 2k, EP 5k,10k, 15k & 20k capable of supplying treated water to 1000,2000, 5000, 10000, 15000 or 20000 persons with their daily needs of both drinking and general use waters. **E.PURE** plant has (2) outlets…..First, ultra pure drinking water,….Second, filtered and disinfected general use water. **E.PURE** plant incorporates the most advanced, efficient and reliable technologies for treatment. Implementing physical membrane technologies allows for efficient, reliable and eco-friendly operation.

epeco.usa

Wastewater Treatment & Recycling

epeco.usa

epeco.usa

EP.MBR.*ffc*

Block A

Modular Membrane Bioreactors **MBR**
Modular Membrane Bioreactors

up to 500 m^3/day

in steel structure for
above ground installation

for:

- ○ Villages
- ○ Small Cities & Towns
- ○ Housing Complexes
- ○ Hotels & Resorts
- ○ Camps
- ○ Campuses & Universities
- ○ Stadiums & Resort Centers
- ○ Harbors
- ○ Airports
- ○ Industrial Plants

epeco.usa

wastewater treatment & reuse

EP.MBR.*ffc*

Block B

Modular Membrane Bioreactors

up to 2000 m^3/day

in steel structure for above ground installation

for:

- ○ Villages
- ○ Small Cities & Towns
- ○ Housing Complexes
- ○ Hotels & Resorts
- ○ Camps
- ○ Campuses & Universities
- ○ Stadiums & Resort Centers
- ○ Harbors
- ○ Airports
- ○ Industrial Plants

epeco.usa

wastewater treatment & reuse

EP.MBR.*ffc*

Block C

Modular Membrane Bioreactors

up to 10’000 m^3/day

in steel structure for above ground installation

for:

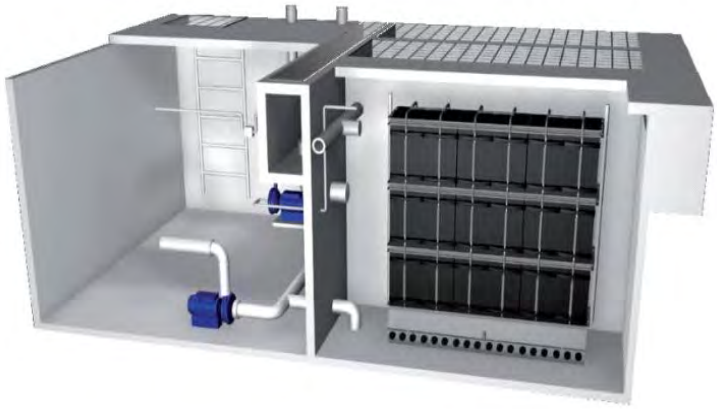
- ○ Large Villages
- ○ Medium Cities & Towns
- ○ Large Housing Complexes
- ○ Large Resorts & Hotels
- ○ Large Camps & Barracks
- ○ Campuses & Universities
- ○ Harbors
- ○ Airports
- ○ Industrial Plants

EPECO.USA

on-board wastewater treatment systems

ep.marinecel.st

wastewater treatment plants for yachts, boats, ships, plateforms.....and more



epeco.usa

ENERGY

epeco.usa

Hazardous & Medical Waste Incinerators

epeco.usa

epeco.usa

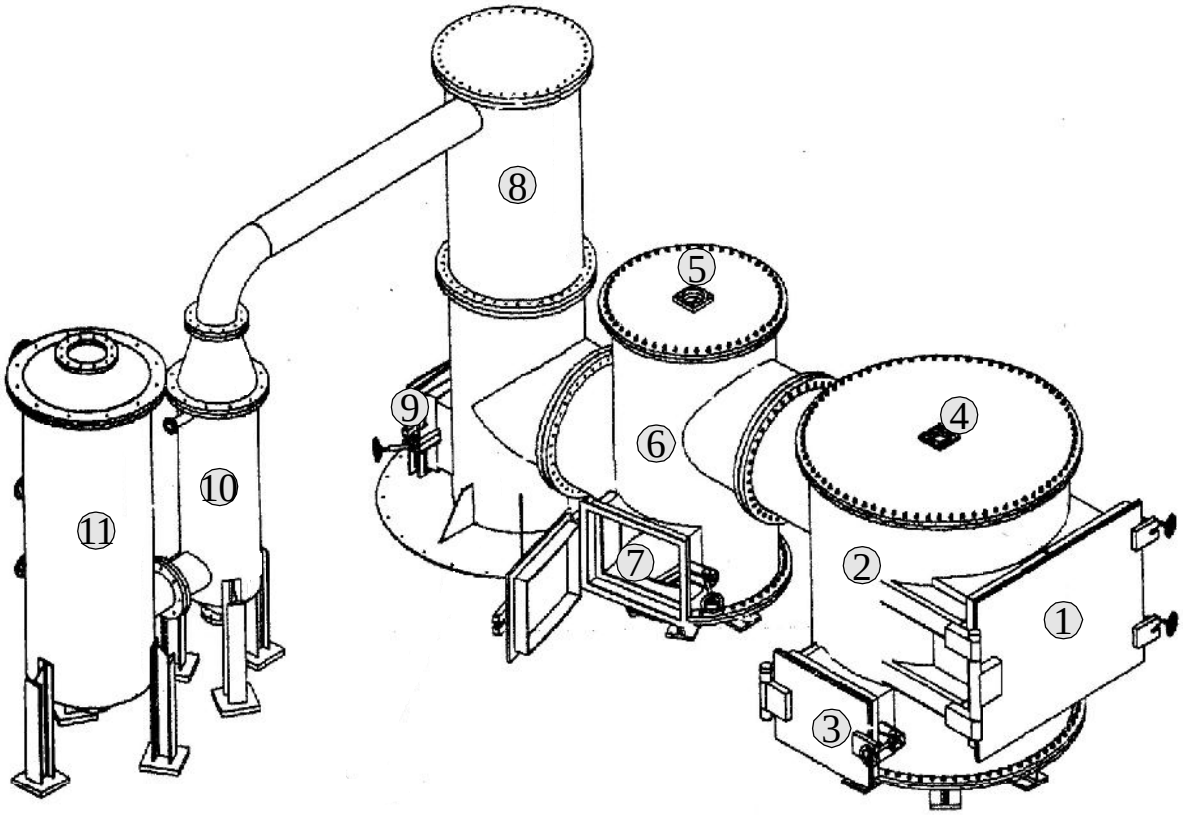
EP.MEDI

Medical Waste Thermal Incinerators

up to 200 kg/hr

EP.MEDI..... System..

1 waste loading front gate
2 primary combustor
3 primary waste de-ashing
4 primary burner
5 secondary burner
6 secondary combustor
7 secondary de-ashing
8 chimney
9 chimney de-ashing gate
10 quenching tower
11 wet scrubber tower



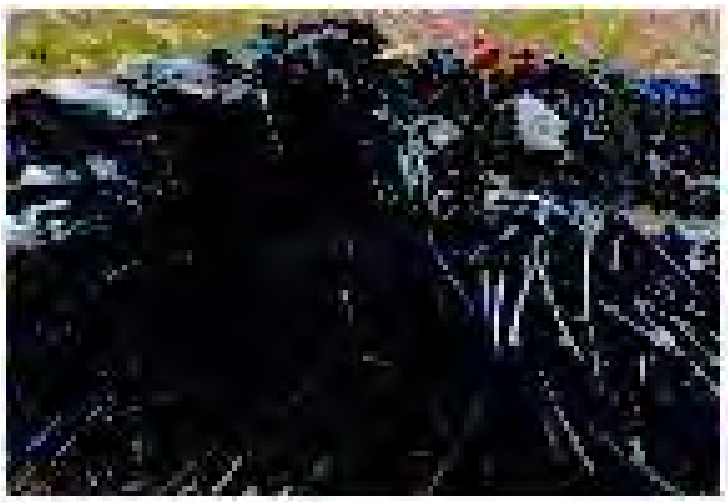
EP.MEDI..... Manufacturing?

EP.MEDI are manufactured by the Arabian Organization for Industrialization, Cairo/Egypt.

Waste to Energy Pyrolysis Reactors

epeco.usa

Waste to Energy Pyrolysis Reactors




EP.W2E systems adopt the pyrolysis reaction process for converting waste biomass solids (Tires, Rubber, Plastic, Wood..etc.) and liquids (Sludge Oil, Drilling Residues,...etc.).

fuel oil and synthesis gas are commonly produced from waste biomass solids pyrolysis reaction, however valuable solid state by-products are also produced (carbon black/ Tires, Charcoal/wood,..etc.)

epeco.usa

Combined Wind Turbine & Photovoltaic Systems

epeco.usa

Combined Wind Turbine+Photovoltaic Energy Systems for Small & Medium Applications

for.....
Individual Homes,
Residential Complexes,
Schools,
Small Factories,
..... and More

It's noticed that the windy & sunny zones are providing weak wind energy during the sun rise time while the peak solar energy is to the maximum. We studied carefully the potential geographical markets for the combined photovoltaic+wind turbine energy systems applications and we found that such a system in most middle east countries will provide the maximum sustainable energy supply efficiency along with the minimum capital investment. Implementing Energy credit exchange Protocols and regulations will support the concept to the maximum.

Water Treatment for Battle Field

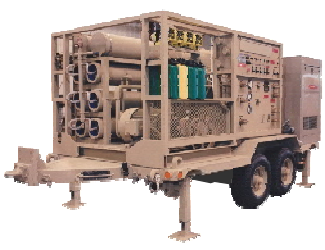
epeco.usa

epeco.usa

water treatment for battle fields

for Battle Fields with Nuclear, Chemical & Water Decontaminators

EP.ROWPU



up to 272 cubic meters
.....(72’000 GPD)/day/unit

EP.ROWPU

Reverse Osmosis Water Purification Systems for Battle Field

EP.ROWPU, the Reverse Osmosis Water Purification systems, designed to provide purified drinking water to soldiers in battle fields. EP.ROWPU can convert contaminated swamps, wells, rivers or oceans water into fresh drinking water within 2 hours from deployment.

Under almost any operating conditions including nuclear, chemical and microbiological attacks, the autonomous EP.ROWPU can produce, a constant flowing stream of pure water, ready for human consumption.

epeco.usa

EP.ROWPU's are manufactured at a wide capacity range (50-250 cubic meters per day). Standard EP.ROWPU's for land based operations are built for installation on a rough terrain military truck for full mobility. The basic EP.ROWPU skid can be easily detached for static installation.

As an alternative to the integrated trailer mounted**,** EP.ROWPU's, can be build in "skid mounted","canopy enclosed" or "self autonomous" systems. This configuration will allow for multiple skids integration for larger capacities operations.

EP.ROWPU's, with Nuclear, Biological and Chemical decontaminators are built in totally enclosed canopy for full protection during operations.

Due to its light weight and reliable performance , EP.ROWPU, are installed on the board of a wide range of navy warships as small as frigates up to large air carriers.

Transport and logistics warships are also equipped with RP.ROWPUs for fresh water making.

EP.ROWPU ..... Navy & Marine **Operations**

Due to its light weight and reliable performance , EP.ROWPU, are installed on the board of a wide range of navy warships as small as frigates up to large air carriers.

Transport and logistics warships are also equipped with RP.ROWPUs for fresh water making.

epeco.usa

Manufacturing & Fabrication

epeco.usa

from Design

to Manufacturing

to installaion

epeco.usa

Kader/AOI
MANUFACTURING Plant

epeco.usa

AGD Plant

epeco.usa

ITAQA/SUEZ Plant

epeco.usa

RAK/UAE Plant

Experience

epeco.usa

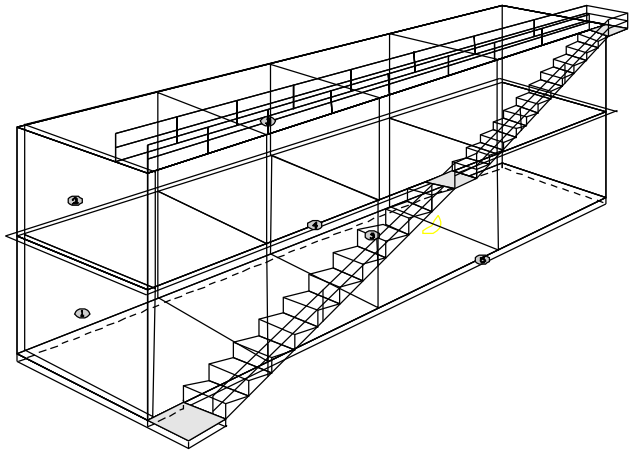
Wastewater Treatment Plants & Equipment

epeco.usa

Manufacturing of EP.MBR 400 S WWTP -400 cu m/day for serial production - Kader/AOI/Egypt -2017

Manufacturing of EP.MBR 400 S WWTP -400 cu m/day for serial production - Kader/AOI/Egypt -2017....contn'd

Description	Wt./ Total, Kg
FRAMES	5142
STEEL PLATES, CORRIGATED	11280
STEEL PLATE, FLAT	2800
TOTAL	19222

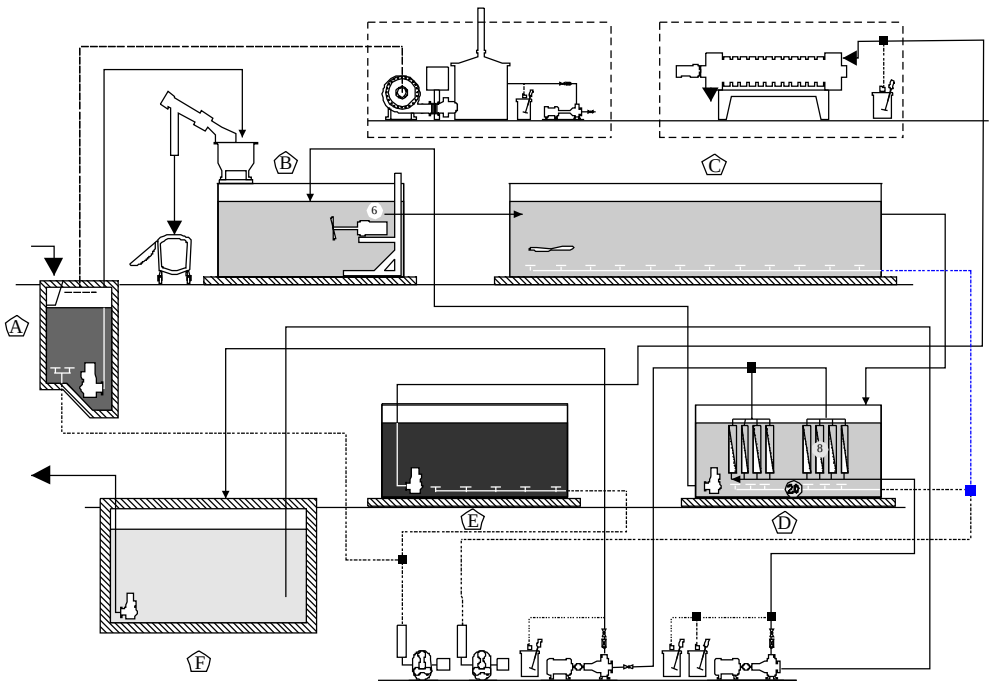


1 LOWER AERATION TANK COMPARTMENT
2 HIGHER AERATION TANK COMPARTMENT
3 BRIDGE
4 TANK JOINT
5 LADDER
6 BASE

ALL DIMENSIONS IN MM
NOT TO SCALE

rev.	date	by	description	chkd	app'd
B	12/15/2016		issued for proposal	MMB	MeB
A	2/07/2016		issued for proposal	MMB	MeB

drawing title: Isometric View Processing Tank
project: EP.MBR 400 S
client: KADER FACTORY/AOI
scale: NTS | chk by | mech | E&I | process MBR | project E17007 | appr'vd MeB
drawing #: P17007 1 01 | sh. no. 2 of 3 | rev. B



A Lifting Station
B Anoxic Tank
C Aeration Tank
D MBR Tank
E Sludge Holding Tank
F Treated Sewage Effluent Tank

rev.	date	by	description	chkd	app'd
B	12/15/2016		issued for proposal	MMB	MeB
A	2/07/2016		issued for proposal	MMB	MeB

drawing title: Process Flow Diagram
project: EP.MBR 400 S
client: KADER FACTORY/AOI
scale: NTS | chk by | mech | E&I | process MBR | project E17007 | appr'vd MeB
drawing #: P17007 1 03 | sh. no. 2 of 3 | rev. B

Manufacturing of EP.MBR 400 S WWTP -400 cu m/day for serial production - Kader/AOI/Egypt -2017....contn'd

ANGLE (double), manufactured from 2 pieces each welded to the side walls and bolted together with gasket

W= 150 mm
H=300 mm
T= 10 mm

Wt./Piece= 23.0 kg/m
Wt.Total= 46.0 kg/m

DETAILS D

CHANNEL
W= 70 mm
H=180 mm
T= 8 mm

Wt= 22.0 kg/m

DETAILS E

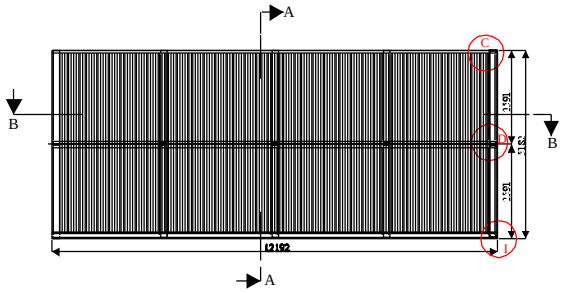
I BEAM
W= 82 mm
H=180 mm
T= 6.9 mm

Wt= 21.9 kg/m

DETAILS F

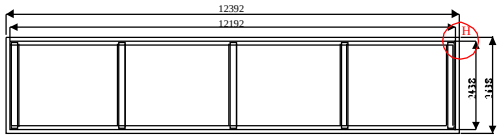
ANGLE, EQUAL
W= 150 mm
T= 10 mm

Wt= 23.0 kg/m



ELEVATION VIEW

SECTION A-A

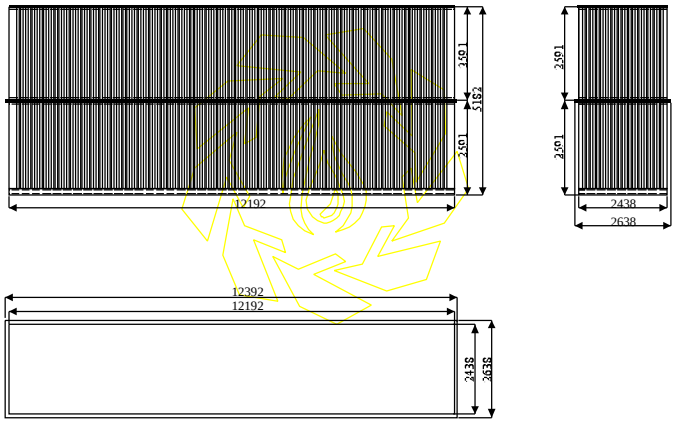


SECTION B-B

ALL DIMENSIONS IN MM
NOT TO SCALE

rev.	date	by	description	chkd	app'd
B	12/15/2016		issued for proposal	MMB	MeB
A	2/07/2016		issued for proposal	MMB	MeB

drawing title: Processing Tank Structural Details
project: EP.MBR 400 S
client: KADER FACTORY/AOI
scale: NTS | chk by | mech | E&I | process MBR | project E17007 | appr'd MeB
drawing #: P17007 1 02 | sh. no. 2 of 3 | rev. B

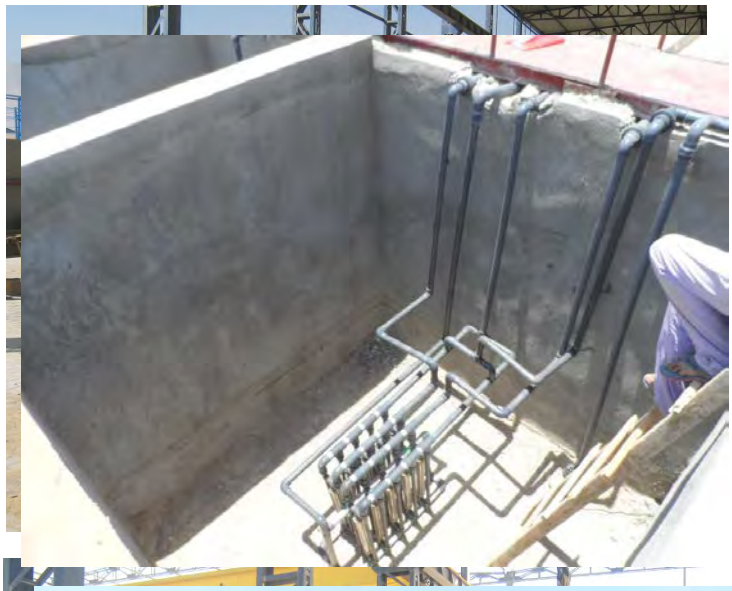


ALL DIMENSIONS IN MM
NOT TO SCALE

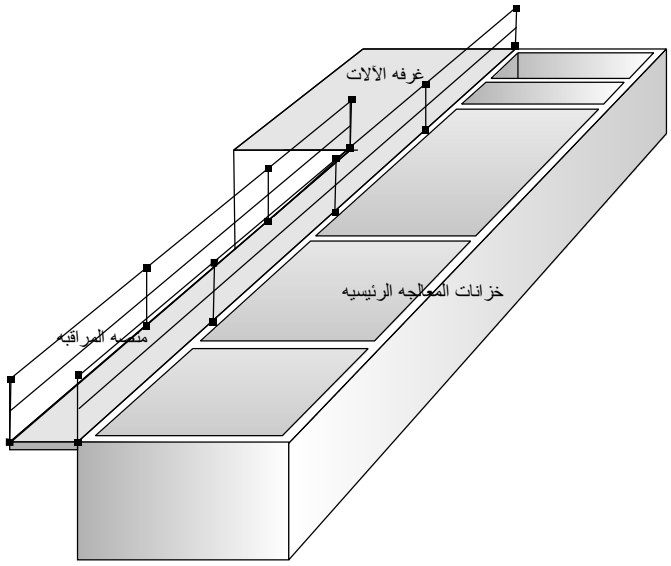
rev.	date	by	description	chkd	app'd
B	12/15/2016		issued for proposal	MMB	MeB
A	2/07/2016		issued for proposal	MMB	MeB

drawing title: Processing Tank Dimensions
project: EP.MBR 400 S
client: KADER FACTORY/AOI
scale: NTS | chk by | mech | E&I | process MBR | project E17007 | appr'd MeB
drawing #: P17007 1 02 | sh. no. 2 of 3 | rev. B

Construction of EP.MBR 200 C WWTP& Reuse-200 cu m/day Suez/Egypt -2013



منظور ثلاثي الأبعاد لخزان المعالجه الرئيسي وغرفه الآلات



خزان المعالجه الرئيسي من الخرسانه المسلحه فوق سطح الأرض
غرفه الآلات من الطوب الأسمنتي فوق سطح الأرض

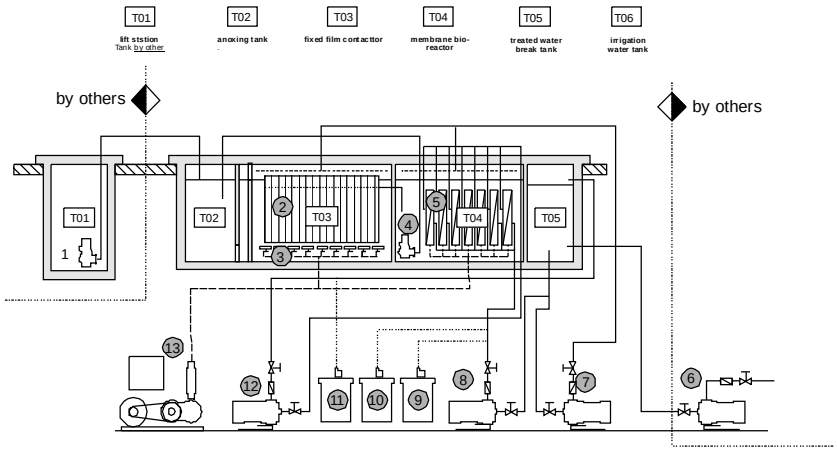
rev	description	date	drwn	chkd	aprvd	aprvd
00	shop drawings	3.25.2015	MeB	--	MeB	--
00	prelim. proposal	3.3.2015	MeB	--	MeB	--

EPECO.USA
MENA Div. Cairo/Egypt
e-mail: maadi@epecousa.com
www.epecousa.com

drawing title:
project: epMBR 50*ffc*
Sokhna, Egypt
client:

project #: p15002	chk'd by:	mech.	E&I	process	projects	appr'vd
scale: NTS						

DWG #: e15002 01 01 — sheet 4 of 7 — rev: 01



1 lift pumps (by others)
2 fixed film contactors FFC modules
3 air difusers
4 sludge return pump
5 membrane bioreactors MBR modules
6 irrigation pumps (by others)
7 foam arresting pump
8 MBR backwash pumps
9 chemical dosing/acid
10 chemical dosing/chlorine
11 chemical dosing/chlorine
12 MBR permeate pump
13 air blowers

rev	description	date	drwn	chkd	aprvd	aprvd
00	prelim. proposal	3.3.2015	MeB	--	MeB	--

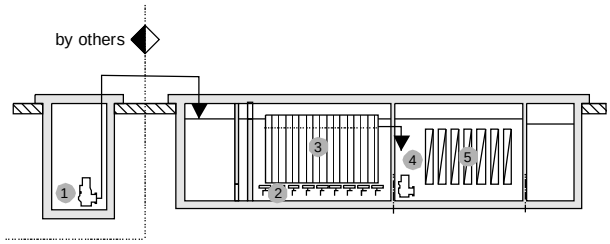
EPECO.USA
MENA Div. Cairo/Egypt
e-mail: maadi@epecousa.com
www.epecousa.com

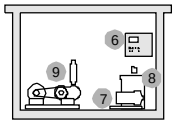
drawing title: Process Flow Diagram
project: EP.MBR 200*ff*
Sokhna, Egypt
client:

project #: p15002	chk'd by:	mech.	E&I	process	projects	appr'vd
scale: NTS						

DWG #: e15002 01 02 — sheet 1 of 3 — rev: 01

Construction of EP.MBR 200 C WWTP& Reuse-200 cu m/day Suez/Egypt -2013



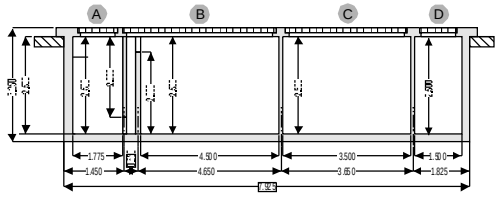


	EQUIPMENT	Qty.
1	lift pumps (by others)	2
2	fixed film contactors FFC modules	lot
3	air difusers	lot
4	sludge return pump	1
5	membrane bioreactors MBR module	1
6	motor control center MCC	1
7.1	foam arresting pump	1
7.2	MBR backwash pump	1
7.3	MBR permeate pump	1
8.1	chemical dosing/acid	1
8.2	chemical dosing/chlorine	1
8.3	chemical dosing/chlorine	1
9	air blower	1

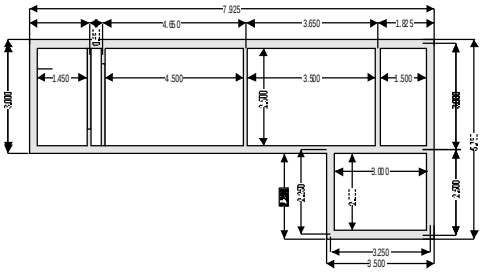
rev	description	date	drwn	chkd	aprvd	aprvd
00	prelim. proposal	3.3.2015	MeB	--	MeB	--

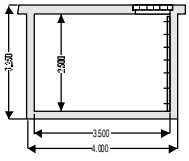
epeco.usa
MENA Div., Cairo/Egypt
e.mail: magdi@epecousa.com
www.epecousa.com

drawing title: Equipment Layout
project: EP.MBR 200*j/c* *Sokhna, Egypt*
client:
project #: p15002 | chk'd by: | mech. | E&I | process | projects | appr'vd
scale: NTS
DWG #: e15002 0103 | sheet 2 of 3 | rev: 01

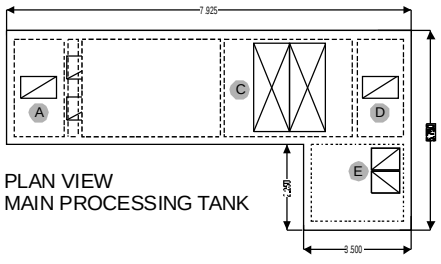


ELEVATION SECTIONAL VIEW-MAIN PROCESSING TANK





ELEVATION SECTIONAL VIEW-PLANT ROOM



PLAN VIEW
MAIN PROCESSING TANK

	manhole cover	Qty.	dimensions LxW mm	material
A	anoxic tank	1	800x600	cast iron
B	fixed film contactors tank	2	1000x600	cast iron
C	aeration tank	2	2000x800	cast iron
D	clear water tank	1	800x600	cast iron
E	equipment room	2	800x600	cast iron

IMPORTANT NOTES

1. all drawings are not to scale NTS.
2. all dimensions are in meters.
3. all dimensions are for guideline only but detailed structural design will be necessary to estimate accurate dimensions (by others).
4. all tanks are made of reinforced concrete (by others).
5. all tanks will be coal tar epoxy coated (2 layers each internally and externally).
6. all all concrete works will be add-mixed with water resistant polymer..
7. all tanks & plant room will be equipped with ventilation.
   all tanks & plant room will be fit with manholes.

rev	description	date	drwn	chkd	aprvd	aprvd
00	prelim. proposal	3.3.2015	MeB	--	MeB	--

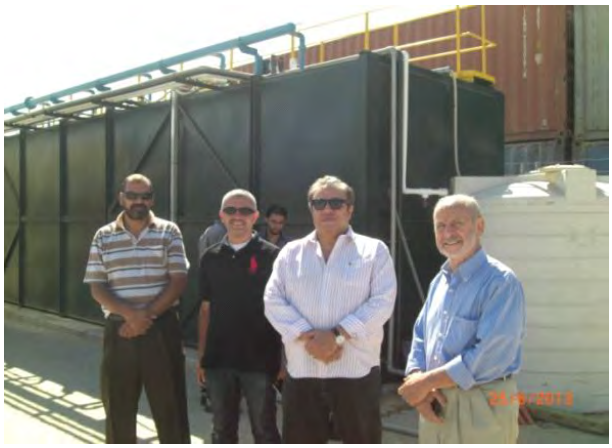
epeco.usa
MENA Div., Cairo/Egypt
e.mail: magdi@epecousa.com
www.epecousa.com

drawing title: Construction Guide Lines
project: epMBR 200*j/c* *Sokhna, Egypt*
client:
project #: p15002 | chk'd by: | mech. | E&I | process | projects | appr'vd
scale: NTS
DWG #: e15002 0104 | sheet 2 of 3 | rev: 01

EP.MBR 400 ffc WWTP&R capacity 400 cu m/day
Sokhna/Egypt -2011

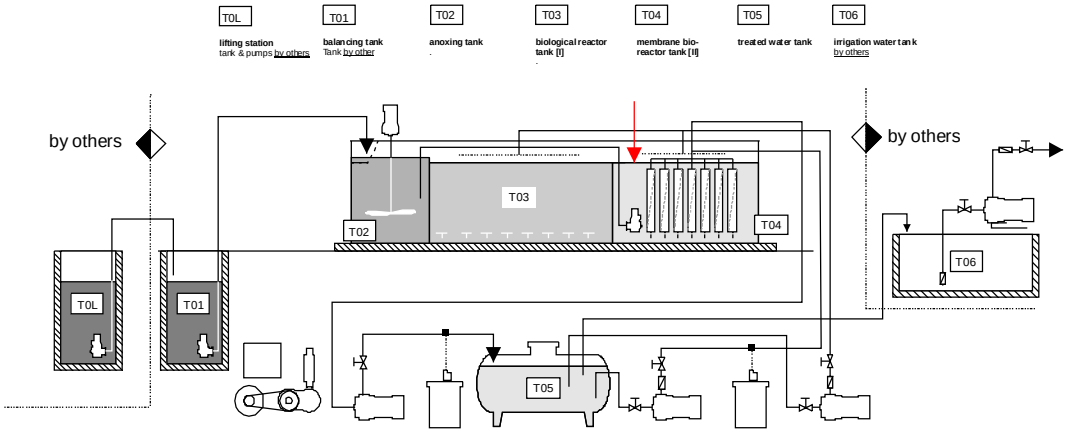
DP World/Sukhna Port
Sokhna/Egypt
Flow Capacity: 400 cu m/day
Completed: 2011

EPECO.GULF designed, manufactured and installed a domestic Wastewater Treatment Plant capacity 400 cu m/dat with peak flow capacity of 50 cu m/hr (EP.MBR 400.S).
The EP.MBR 400.S plant is built in steel structure for above ground installation.
EP.MBR 400.S performance is enhanced to treat influent with BOD_5, COD, TSS, TN & TP=800,2000,600,150 & 50 mg/l and produce effluent with BOD_5, COD, TSS, TN & TP=10,70,10,10 &10 mg/l or better. It's obvious that the influent characteristics figures exceeds the given limits while our anticipated performance in much better than the required by the Egyptian Law No. 93/1963 and its amendment executive decree No. 44/2000.



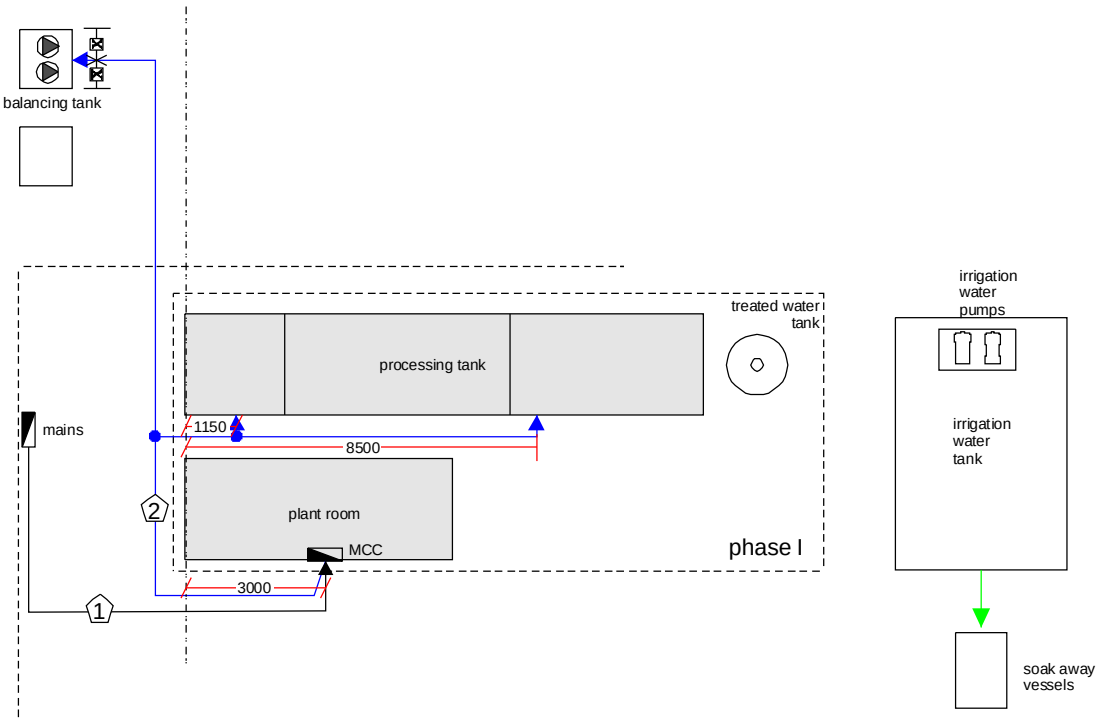
EP.MBR 400 ffc WWTP&R capacity 400 cu m/day*.....contn'd*

Sokhna/Egypt -2011



epeco.gulf
RAK, UAE
e.mail.magdi@epecogulf.com
www.epecogulf.com

drawing title: Process Control & Monitoring-Visual Inducators
project: WWTP at Sokhna Port/Egypt, capacity 400 cu m/day
client: DP World/Ensol
project #: P11025 | chk'd by: | mech. | E&I | process | projects | appr'vd
scale: NTS
DWG #: P1102545 | sheet 45 of 50 | rev: 00



legendn:

x — virtual distances

x x x — equal distances

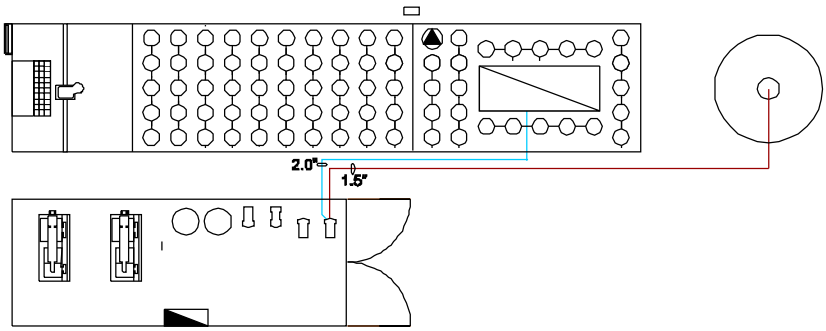
reference line

epeco.gulf
RAK, UAE
e.mail.magdi@epecogulf.com
www.epecogulf.com

drawing title: Site Layout
project: WWTP at Sokhna Port/Egypt, capacity 400 cu m/day
client: DP World/Ensol
project #: P11025 | chk'd by: | mech. | E&I | process | projects | appr'vd
scale: NTS
DWG #: P1102545 | sheet 45 of 50 | rev: 00

EP.MBR 400 ffc WWTP&R capacity 400 cu m/day.....*contn'd*

Sokhna/Egypt -2011



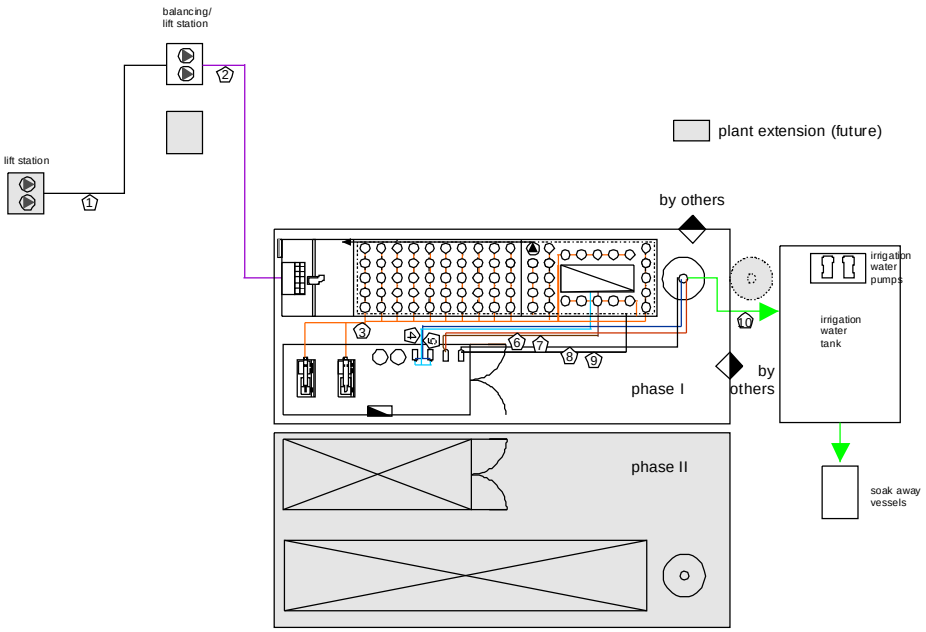
Important Note
All backwash water pipes & fittings are uPVC
All uPVC pipes are PN10

LEGEND

- air blower
- permeate pump
- backwash pump
- chemical system
- control panel
- air diffusers
- MBR Modules
- Coarse/Fine Screens
- clean water tank
- mixer
- Plant Room
- main processing tank

epeco.gulf
RAK, UAE
e.mail:magdi@epecogulf.com
www.epecogulf.com

drawing title: Tank & Plant Room Arrangement
project: WWTP at Sokhna Port/Egypt, capacity 400 cu m/day
client: DP World/Ensol
project #: P11025 | chk'd by: | mech. | E&I | process | projects | appr'vd
scale: NTS
DWG #: P1102545 | sheet 45 of 50 | rev: 00



Color	No	Description	Dia	material
	1	lift station:balancing tank (by others)	n/a	n/a
	2	balancing tank : main processing tank (by others)	4"	uPVC
	3	air supply network	4"	GS/welded
	4	permeate water suction	2.5"	uPVC
	5	permeate water delivery	2"	uPVC

Color	No	Description	Dia	material
	6	backwash suction	2"	uPVC
	7	backwash delivery	1.5"	uPVC
	8	foam arrestor suction	1.25"	uPVC
	9	foam arrestor delivery	1.0"	uPVC
	10	treated water delivery	3.0"	uPVC

LEGEND

- membrane module
- air blower
- horizontal end suction pump
- subersible pump
- chemical injection system
- diffusers
- motor control center

epeco.gulf
RAK, UAE
e.mail:magdi@epecogulf.com
www.epecogulf.com

drawing title: Total Site Arrangement
project: WWTP at Sokhna Port/Egypt, capacity 400 cu m/day
client: DP World/Ensol
project #: P11025 | chk'd by: | mech. | E&I | process | projects | appr'vd
scale: NTS
DWG #: P1102545 | sheet 45 of 50 | rev: 00

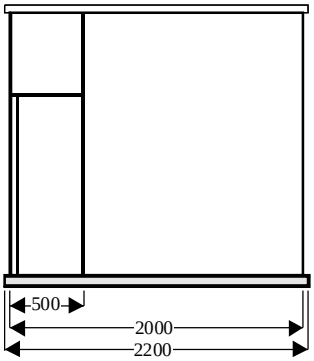
EP.MBR 50 ffc WWTP&R capacity 50 cu m/day.....*contn'd*
Ras al Khaimah/UAE-2010

Aluminum Factory/Union Group
Ras al Khaimah/United Arab Emirates
Flow Capacity: 50 cu m/day
Completed: 2010

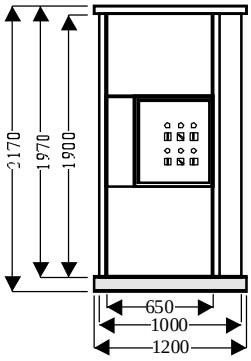
EPECO.USA designed, manufactured and installed a pilot plant to investigate the performance of the EP.MBR 50 *ffc* wastewater treatment systems at RAK Aluminum Factory/UAE. The pilot plant was built with the same configuration of the EP.MBR50j-steel structure for above ground installation, with capacity range up to 50 cu m/day and peak flow of 6.25 cu m/hr.

The pilot plant-EP.MBR 50 *ffc/* mathmode50, is working jointly with**EPECO.USA**'s EP.MATHMODE mathematical model & scale prototype, specially designed to test and investigate the performance of a wide range and multiple parameters of membrane bioreactor wastewater treatment systems.

EP.MBR 50 ffc WWTP&R capacity 50 cu m/day*.....contn'd*
Ras al Khaimah/UAE-2010



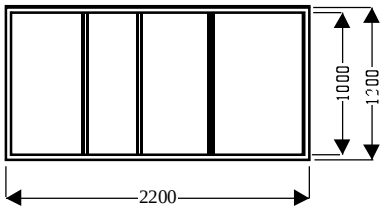
elevation view



side view

Material: Mild steel, high commercial grade.
Sheet Metal Thickness: 3 mm.
Internal Coating: Two layers coal tar epoxy coating.
External Coating: Two layers polyester epoxy coating.

For cost estimation proposal use only.
Not intended for fabrication.



plan view

Rev	Description	Drawn	Date	Checked	Approved
	Revision				

epeco.usa

Projection	None
Scale	None
Unit	Meter

Project	EP.MBR 50 ffc Full Scale Prototype for above-ground installation in steel construction
Title	general dimensionst
To:	EPECO,GULF

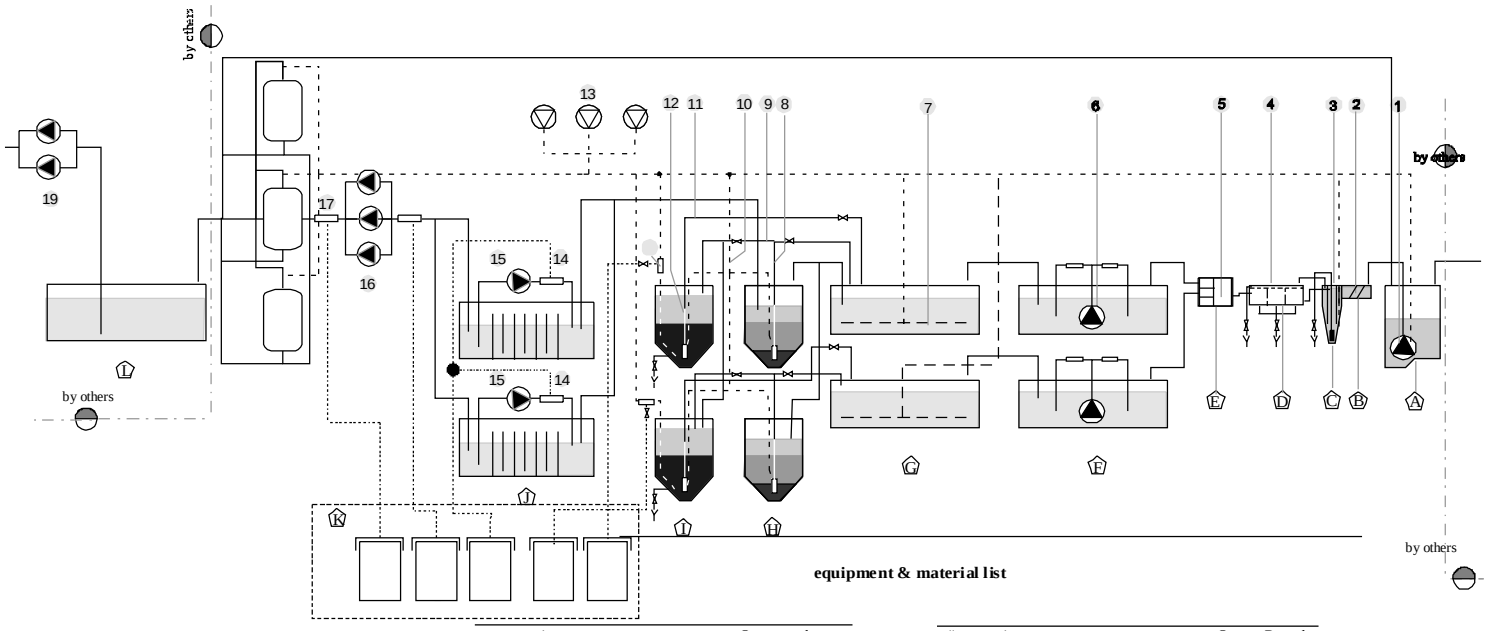
Size	Document No	Sheet	No of Sheets
A4	1010-01 EP	1	27

Wastewater Treatment Plant WWTP

RAKIA Industrial Zone-Ras el Khaimah Investment Authority
Ras al Khaimah/United Arab Emirates
Flow Capacity: 2400 cu m/day
Completed: 2009

EPECO.USA designed and built a domestic wastewater treatment and recycling plant at RAKIA industrial zone at Ras al Khaimah, UAE. The WWTP based on EP.MBR 2400 c product from **EPECO.USA**, has been designed to serve the industrial users in the area. The average flow is 200 cu m/hr and the peak flow capacity is 600 cu m/hr.

Wastewater Treatment Plant WWTP..... *contn'd*



equipment & material list

	equipment	Qty.	remarks
1	Lifting equalization pumps	3	2+1
2	coarse/fine screens(set)	2	1+1
3	grit removal devices	1	
4	FOG separation devices	1	
5	split box devices	1	
6	aeration pumps	3	
7	diffused air network	1	
8	air lift/clarifiers	2	
9	excess sludge return	1	
10	air supply line	1	
11	activated sludge supply	1	
12	air lift /sludge holding tank	1	
13	air blowers	1	2+1

#	equipment	Qty.	Remarks
14	chlorine injection dynamic mixer	1	
15	chlorine circulation pump	2	
16	filter feed/backwash pumps	3	2+1
17	sodium hypochlorite injection	1	
18	media filters	3	
19	irrigation pumps	3	by others
20	nutrient (I) tank	1	
21	nutrient (II) tank	1	
22	Sodium hypochlorite tank	1	
23	coagulant tank	1	
24	Coagulant hypochlorite tank	1	

processing compartments & rooms

#	system/tank	Qty.	remarks
A	Equalization tank	1	by others
B	Coarse/fine screen	1	by others
C	grit removal system	1	by others
D	FOG removal system	1	by others
E	split box	1	by others
F	aeration tanks (I)	2	by others
G	aeration tanks (II)	2	by others
H	clarifier	2	by others
I	sludge holding tank	2	by others
J	chlorine contact tank	2	by others
K	chemical injection systems	1	by others
L	irrigation water tank	5	by others

Rev	Description	Drawn	Date	Checked	Approved

Revision

epeco .gulf
P.O.Box 312,
el Jazirah el Hamrah,
Ras al Khaima, UAE
Tel: +971 7 244 7684
Fax: : +971 7 244 7685

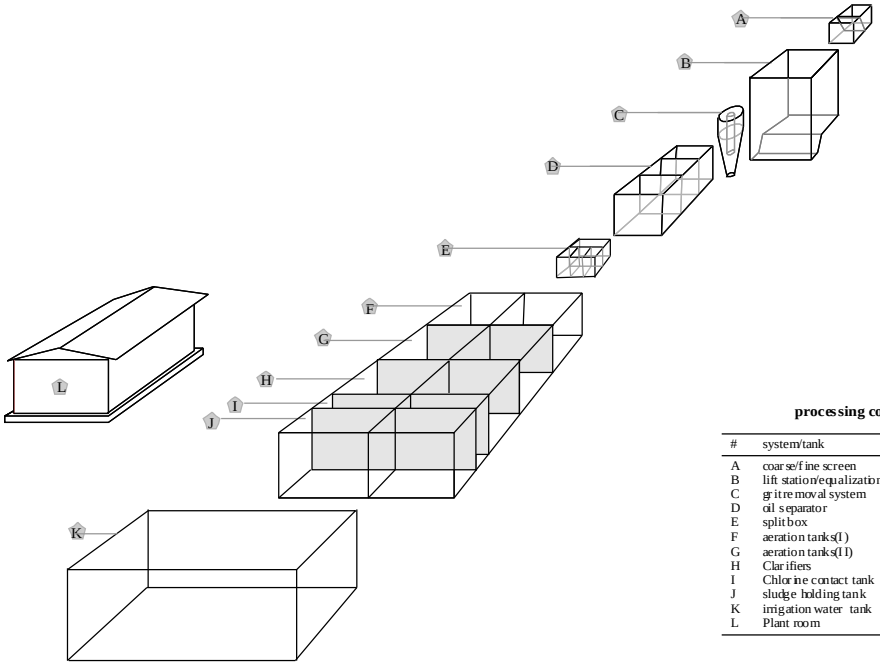
Project: WWTP & Recycling 2400 m3/day RAK Ind. Area
Title: Process Flow Diagram
To: The Governoment of Ras Al Khaima

Projection	Scale	Size	Document No	Sheet	No of Sheets
None	None	A3	07004-01	1	50
	Unit Meter				

The EP.MBR 2400c Plant is working with Membrane Bioreactor MBR principle, however the process has been enhanced by adding the **EPECO.USA** innovative super nutrition system, which allows the plant to operate at hydraulic loading as low as 15% and as high as 150% of the average daily flow with no sacrifice of efficiency or effluent quality.

The EP.MBR 2400c is built in 2 similar but independent streams which will allow the plant to work at 50% capacity any time. This is an important feature, especially in case of service stopping.

Wastewater Treatment Plant WWTP..... *contn'd*



processing compartments & rooms

#	system/tank	Qty.	remarks
A	coarse/fine screen	1	
B	lift station/equalization tank	1	
C	grit removal system	1	
D	oil separator	1	
E	split box	1	
F	aeration tanks(I)	2	
G	aeration tanks(II)	2	
H	Clarifiers	2	
I	Chlorine contact tank	2	
J	sludge holding tank	2	
K	irrigation water tank	1	
L	Plant room	1	

Important

This drawing is not intent for construction & building execution. Detailed constructional design and drawings must be prepared by professional - certified engineers.

Not to scale.

All tanks are covered and have appropiate manhole for each compartment.

Concrete works are not included in EPECO's scope of work.

Rev	Description	Drawn	Date	Checked	Approved

Revision

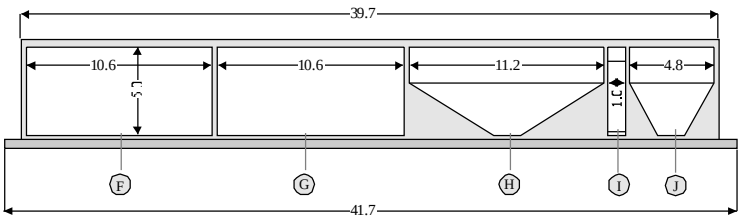
epeco .gulf
P.O.Box 312,
el Jazirah el Hamrah,
Ras al Khaima, UAE
Tel: +971 7 244 7684
Fax: : +971 7 244 7685

Project: WWTP & Recycling 2400 m3/day RAK Ind. Area

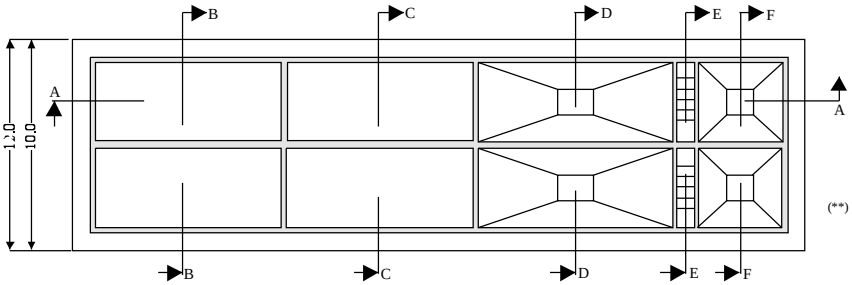
Title: isometric view

To: The Governoment of Ras Al Khaima

Projection	Scale	Size	Document No	Sheet	No of Sheets
None	None	A3	07004-02	1	50
	Unit Meter				



section A-A



plan view

Required

Proposal for turn key civil works for construction of the indicated tank for above ground installation.
Proposal must cover the concrete works and the coating.
Assume thickness of walls= 300 mm, reinforced concrete till design verification is completed.
Assume thickness of the roof =400 mm, reinforced concrete till design verification is completed.
Assume thickness of the base= 300 mm, reinforced concrete till design, verification is completed.
Assume thickness of the foundation sub-layer base= 500 mm, regular concrete, till design, verification is completed.

Alternative proposal for under ground tank is also required, consider excavation of medium soft loose soil.

#	Tank *	Qty.	Unit dimensions ** X	Y	Z
F	aeration compartment (I)	2	10.6	4.5	5.0
G	aeration compartment (II)	2	10.6	4.5	5.0
H	clarifiers	2	11.2	4.5	5.0
I	chlorine contact tank	2	1.0	4.5	5.0
J	sludge holding tank	2	4.8	4.5	5.0

(*) All dimensions in meters.

(**) X: Length Y: Width Z: Depth

reinforced concrete volume= 600 m3
regular concrete volume= 265 m3

coatings- coal tar epoxy-3 layers-total= 8700 m2

excavation volume (optional)=4600 m3

Rev	Description	Drawn	Date	Checked	Approved

Revision

epeco .gulf
P.O.Box 312,
el Jazirah el Hamrah,
Ras al Khaima, UAE
Tel: +971 7 244 7684
Fax: : +971 7 244 7685

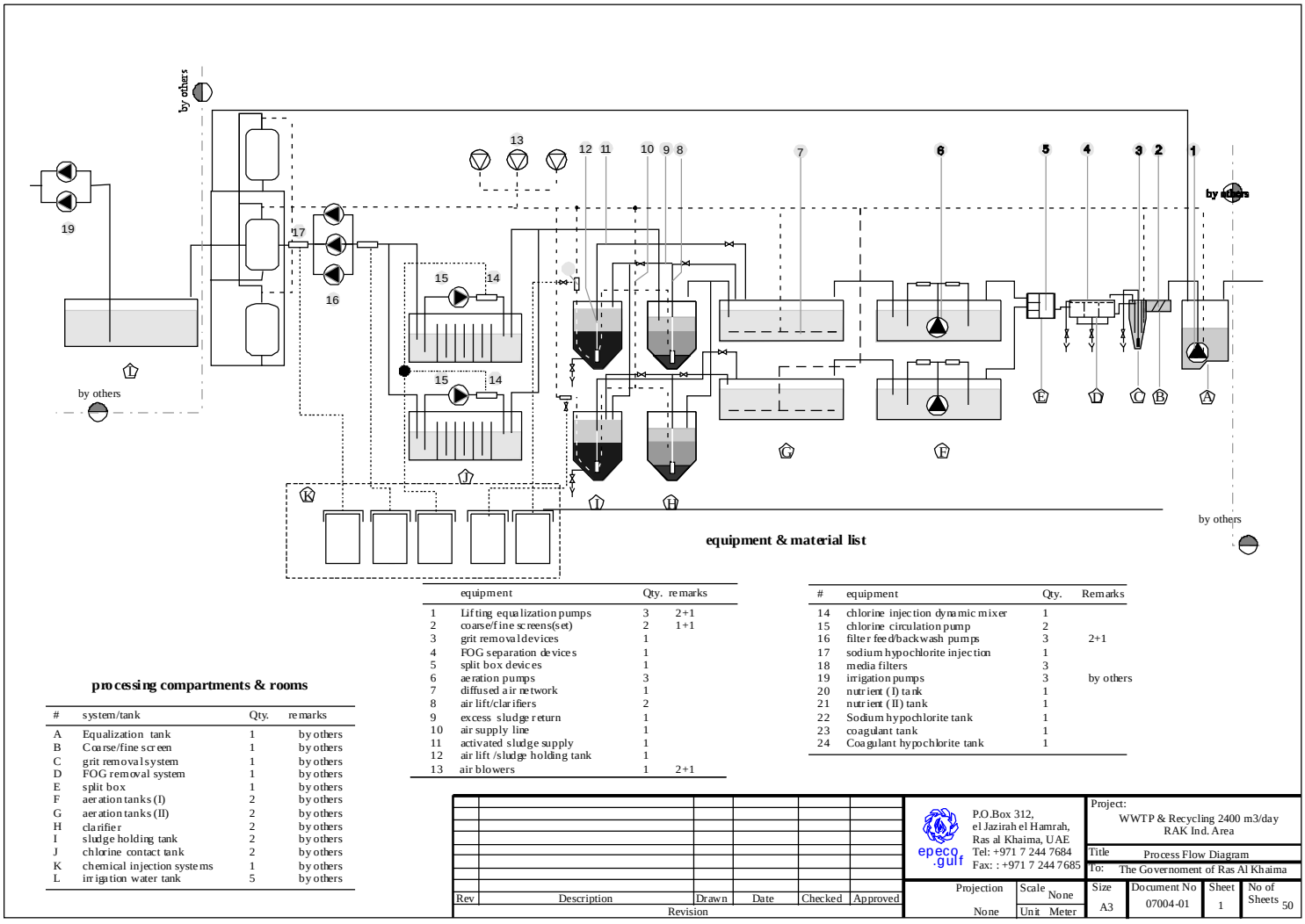
Project: WWTP & Recycling 2400 m3/day RAK Ind. Area

Title: Constructional Outlines-Main Tank

To: The Governoment of Ras Al Khaima

Projection	Scale	Size		Sheet	No of Sheets
None	None	A3	07004-03	1	50
	Unit Meter				

Wastewater Treatment Plant WWTP..... *contn'd*



equipment & material list

	equipment	Qty.	remarks
1	Lifting equalization pumps	3	2+1
2	coarse/fine screens(set)	2	1+1
3	grit removal devices	1	
4	FOG separation devices	1	
5	split box devices	1	
6	aeration pumps	3	
7	diffused air network	1	
8	air lift/clarifiers	2	
9	excess sludge return	1	
10	air supply line	1	
11	activated sludge supply	1	
12	air lift /sludge holding tank	1	
13	air blowers	1	2+1

#	equipment	Qty.	Remarks
14	chlorine injection dynamic mixer	1	
15	chlorine circulation pump	2	
16	filter feed/backwash pumps	3	2+1
17	sodium hypochlorite injection	1	
18	media filters	3	
19	irrigation pumps	3	by others
20	nutrient (I) tank	1	
21	nutrient (II) tank	1	
22	Sodium hypochlorite tank	1	
23	coagulant tank	1	
24	Coagulant hypochlorite tank	1	

processing compartments & rooms

#	system/tank	Qty.	remarks
A	Equalization tank	1	by others
B	Coarse/fine screen	1	by others
C	grit removal system	1	by others
D	FOG removal system	1	by others
E	split box	1	by others
F	aeration tanks (I)	2	by others
G	aeration tanks (II)	2	by others
H	clarifier	2	by others
I	sludge holding tank	2	by others
J	chlorine contact tank	2	by others
K	chemical injection systems	1	by others
L	irrigation water tank	5	by others

Rev	Description	Drawn	Date	Checked	Approved
	Revision				

epeco .gulf
P.O.Box 312,
el Jazirah el Hamrah,
Ras al Khaima, UAE
Tel: +971 7 244 7684
Fax: : +971 7 244 7685

Project: WWTP & Recycling 2400 m3/day RAK Ind. Area
Title: Process Flow Diagram
To: The Governoment of Ras Al Khaima

Projection	Scale	Size	Document No	Sheet	No of Sheets
None	None	A3	07004-01	1	50
	Unit Meter				

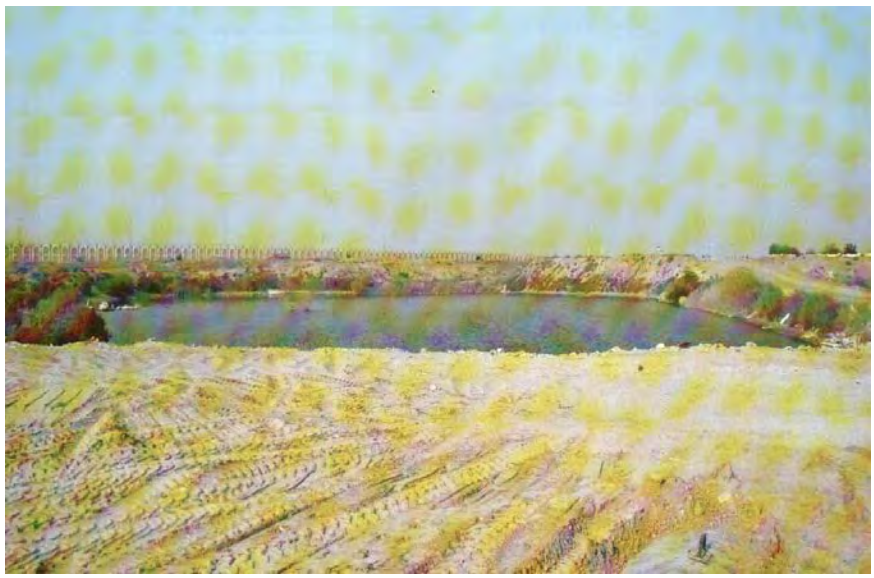
The EP.MBR 2400c Plant is working with Membrane Bioreactor MBR principle, however the process has been enhanced by adding the **EPECO.USA** innovative super nutrition system, which allows the plant to operate at hydraulic loading as low as 15% and as high as 150% of the average daily flow with no sacrifice of efficiency or effluent quality.

The EP.MBR 2400c is built in 2 identical, but independent streams which will allow the plant to work at 50% capacity any time. This is an important feature, especially in case of service stopping.

Industrial WastewaterTreatment Plant IWWTP

Wastewater Collection Lagoon at Muwailah
Sharjah / United Arab Emirates (2008)

Flow Capacity IWWRP: 3000 cu m/day.
Flow Capacity Desalination Plant: 1000 cu m/day
Completed: 2008



In March 2007, **EPECO.USA** was awarded a design-build & operate contract to construct a wastewater treatment & recycling plant at Muwailah/Sharjah, United Arab Emirates.
The raw wastewater influent from Muwailah lagoon, filled with substandard treated domestic wastewater effluent dumped into sanitary dump area. The wastewater lagoon was rich in heavy metals, microbial contamination and algae. Many metal ions, such as mercury, lithium, iron, manganese and many others are existing in the lagoon water. The aquamarine life near the lagoon is totally terminated.

EPECO.USA designed, built and operated a treatment system to treat the lagoon water and convert it into fresh water suitable for irrigation and domestic non-potable applications. **EPECO.USA** carried –out many tests and investigations which indicated that 1000 cu m/day of fresh water can be produced from the lagoon water. The lagoon water volume was estimated at 600'000 cu m, with seasonal seepage add-up. **EPECO.USA** designed the process that minimized the reject water to be discharged to the open seas. The reject water was free of algae, oil, grease and /or biological contaminants.

EPECO.USA designed and manufactured a mathematical model and built a bench top scale prototype EP.WASTE leachate 07 UAE to simulate the system performance. All other equipment including: open intake EP.FLOAT3000, An electrolytic Sodium Hypochlorite generator- EP.CNS 150k, dissolved air flotation/lamella clarifier/tube mixer EP.DAF 3000, backwashable microfine filtration system-EFiltera 2000 b, microfine filtration system-EP.Filtera 2000 s, ultraviolet wastewater disinfection & bio-degradation system EP.UV2000 indu, Ultrafiltration (UF) system, wastewater treatment system EP.UF 2k and Seawater Reverse Osmosis Desalination System EP.RO 1000s.

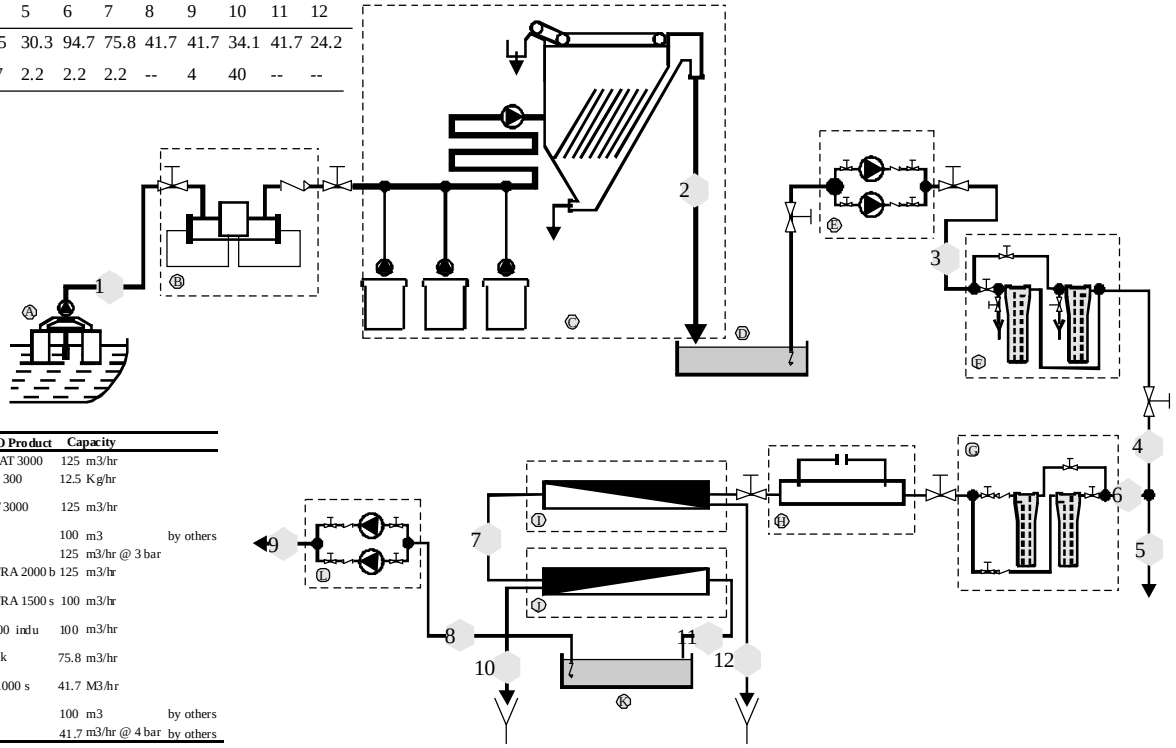
Industrial WastewaterTreatment Plant IWWTP...*contn'd*

Wastewater Collection Lagoon at Muwailah

Industrial WastewaterTreatment Plant IWWTP...*contn'd*

Wastewater Collection Lagoon at Muwailah

	1	2	3	4	5	6	7	8	9	10	11	12
m3/hr	125	125	125	125	30.3	94.7	75.8	41.7	41.7	34.1	41.7	24.2
bar	1.9	--	3	2.7	2.2	2.2	2.2	--	4	40	--	--



#	Item	EPECO Product	Capacity		
A	open water intake	epFLOAT 3000	125	m3/hr	
B	electrolytic sodium hypochloritegenerator	epCNS 300	12.5	Kg/hr	
C	DAF/lamella clarifier/ tube mixer	epDAF 3000	125	m3/hr	
D	clear water tank		100	m3	by others
E	booster pumps station		125	m3/hr @ 3 bar	
F	backwashable sediment removal filters	epFILTRA 2000 b	125	m3/hr	
G	microfine sediment removal filter	epFILTRA 1500 s	100	m3/hr	
H	ultraviolet wastewater degradation sterilize.	UV 1500 indu	100	m3/hr	
I	ultrafiltration wastewater treatment system	epUF 2k	75.8	m3/hr	
J	seawater reverse osmosis desalination system	epRO 1000 s	41.7	M3/hr	
K	irrigation water tank		100	m3	by others
L	irrigation pumps station		41.7	m3/hr @ 4 bar	by others

Rev	Description	Drawn	Date	Checked	Approved
1	change in epROs, epUF capacity & others		25-10-06		MeB

Revision

MET

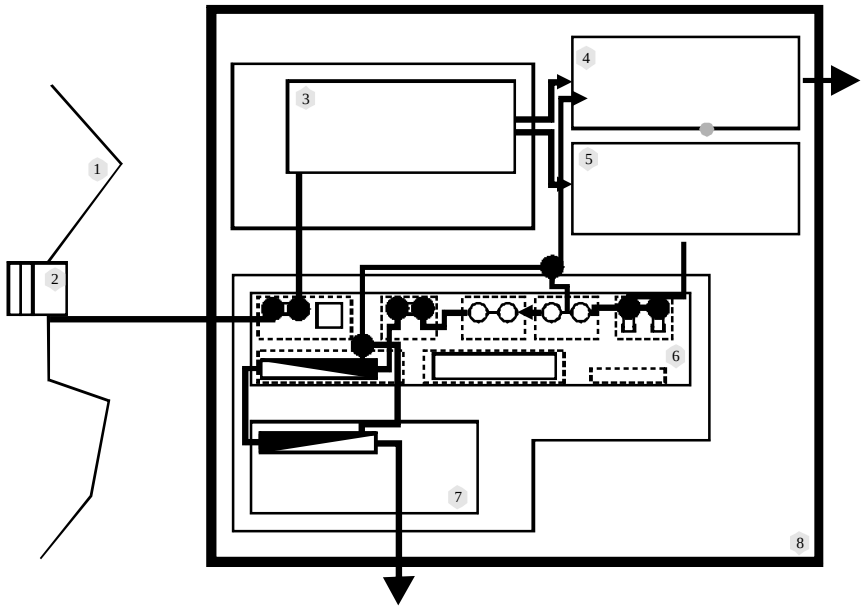
Title: Process Flow Diagram

Project: WWTP 3000 m3/day-UAE

Project #:

Projection	Scale	Size	Document No	Sheet	No of Sheets
none	none	A3	07009-001-R1	1	10

Unit none



1	coast line		
2	step down stairs		
3	DAF tank		steel by epecoGULF
4	sludge,scum & brine tank	length x width x depth (internal)=6.2 x 2.5x2 .5 m	concrete-under ground-by others
5	clear water tank	length x width x depth (internal)=6.2 x 2.5x2 .5 m	concrete-under ground-by others
6	main plant room	length x width x depth (internal)=12.0 x 2.5x2 .5 m	ISO 40 FT container-above ground-by others
7	RO container	length x width x depth (internal)=6.2 x 2.5x2 .5 m	ISO 20 FT container-above ground-by others
8	fence	length x width=15.0 x 16.5 m	By others

Rev	Description	Drawn	Date	Checked	Approved
1					

Revision

epecoGULF

Title: Site Layout

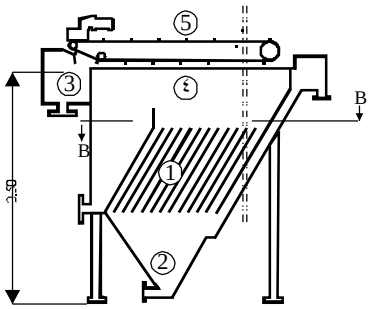
Project: WWTP 3000 m3/day-UAE

Project #:

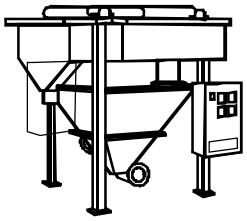
Projection	Scale	Size	Document No	Sheet	No of Sheets
none	none	A3	07009-012-R1	12	50

Unit none

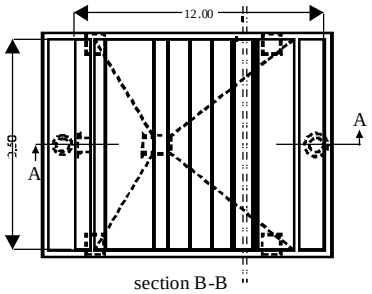
Industrial WastewaterTreatment Plant IWWTP...*contn'd*
Wastewater Collection Lagoon at Muwailah



section A-A



epDAF 3000
isometric view



section B-B

technical data

The System

dimensions (length x width x height)	m	6.2 x 2.5 x 2.5
inlet port-flanged	inch	6
sludge disposal port-flanged	inch	٤
floatings drain port -flanged	inch	6
Inlet port-flanged	Inch	6
clear water discharge port -flanged	inch	6
weight (dry)	kg	2500
weight (wet)	kg	24000

components

#	Qty	item
1	1	lamella clarifier
2	1	sludge compartment
3	1	floatings collection compartment
٤	1	skimmer-mechanical
5	1	flotation area

Performance

treatment capacity-average	m3/hr	125
treatment capacity-max	m3/hr	125
hydraulic loading rate-ave	m/hr	8.3
solids loading rate (SLR)-ave	kg/m2.hr	4.2
air/solids (A/S) ratio		0.01

Rev	Description	Drawn	Date	Checked	Approved
1	change in epROs, epUF capacity & others		11-03-07		MeB

Revision

10 Tayaran Str.,
Raba'a el Adawia,
Nasr City, Cairo
Tel: +20 2 401 2488
Fax: + 20 2 401 6626
e.mail: epec@link.net
www.epecoUSA.com

Title: epDAF3000 Process Flow Diagram

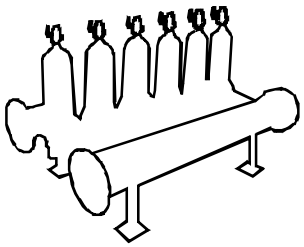
Project: WWTP 3000 m3/day-UAE

Project #:

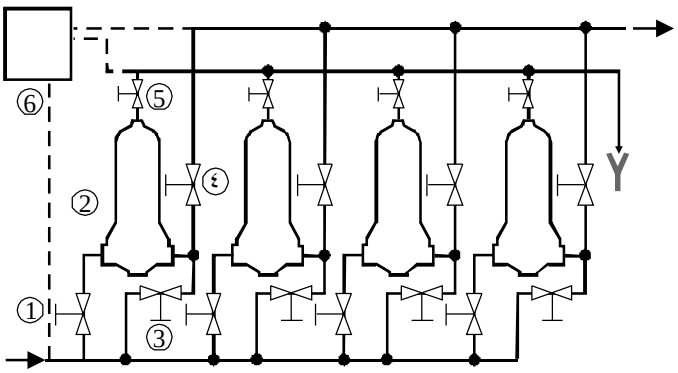
Projection	Scale	Size	Document No	Sheet	No of Sheets
none	none	A3	07009-001-R1	1	10

Unit none

#	Qty	item	description
1	4	feed valve	diaphragm/solenoid
2	4	backwashable filter	polyethylene cartridge 50 micrometer micron rating & 50 m3/hr each
3	4	backwash valve	diaphragm/solenoid
4	4	filtrate valve	diaphragm/solenoid
5	4	drain valve	diaphragm/solenoid
٦	1	automatic control system	PLC-fully automatic operation cycle -pressure/time



epFILTRA 2000 b
general view



The System

configuration		4 filters (3 duty + 1 stand-by)
control		PLC control-automatic-pressure/ time + manual
in/out	inch	6 flanged
flow capacity-max.	m3/min	3300
operating pressure-max	bar	10
operating temperature-max	deg c	50
micron rating	micron	50
power supply	v/ph/hz	220/1/50
power rating	kw	<1
weight (dry)	kg	250
weight (wet)	kg	550

Rev	Description	Drawn	Date	Checked	Approved
1	change in epROs, epUF capacity & others		11-03-07		MeB

Revision

10 Tayaran Str.,
Raba'a el Adawia,
Nasr City, Cairo
Tel: +20 2 401 2488
Fax: + 20 2 401 6626
e.mail: epec@link.net
www.epecoUSA.com

Title: epFILTRA 2000 b process flow diagram-& general views

Project: WWTP 3000 m3/day-UAE

Project #:

Projection	Scale	Size	Document No	Sheet	No of Sheets
none	none	A3	07009-001-R1	1	10

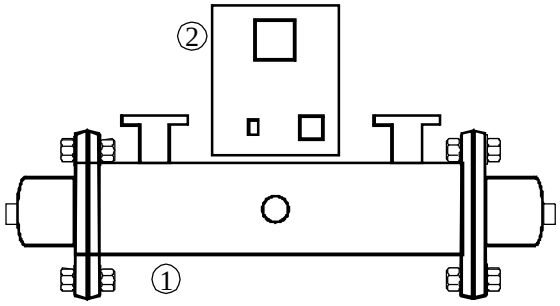
Unit none

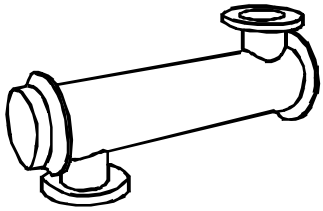
Industrial WastewaterTreatment Plant IWWTP...*contn'd*
Wastewater Collection Lagoon at Muwailah

performance

treatment capacity-average	m3/hr	125
treatment capacity-max	m3/hr	180
UV output (at 254 nm wave length)	KW	6.7

#	Qty	item	description
1	٣	UV reactor	AISI 316 L compartment+hard glass quartz glass tube +medium pressure mercury vapor lamps
2	١	Power supply	choke ballasts + controls





UV 2000 indu
general view

The System

UV source		medium pressure mercury vapor lamps (multiple)
quartz glass tubes		hard quartz glass (multiple)
power pack		choke
housing (3)		AISI 316L
power supply	kw	40
dimensions (each housing) (length x diameter)	mm	1200 x 220
inlet port-flanged	inch	6
outlet port-flanged	inch	6
weight (dry)	kg	125
weight (wet)	kg	200

Rev	Description	Drawn	Date	Checked	Approved
1	change in epROs, epUF capacity & others		11-03-07		MeB

Revision

epeco
10 Tayaran Str.,
Raba'a el Adawia,
Nasr City, Cairo
Tel: +20 2 401 2488
Fax: + 20 2 401 6626
e.mail: epec@link.net
www.epecoUSA.com

Title: UV1500 indu
process flow diagram-& general views

Project: WWTP 3000 m3/day-UAE

Project #:

Projection	Scale	Size	Document No	Sheet	No of Sheets
none	none	A3	07009-001-R1	1	10
	Unit none				

Wastewater Treatment & Reuse

Banyan Tree Resort

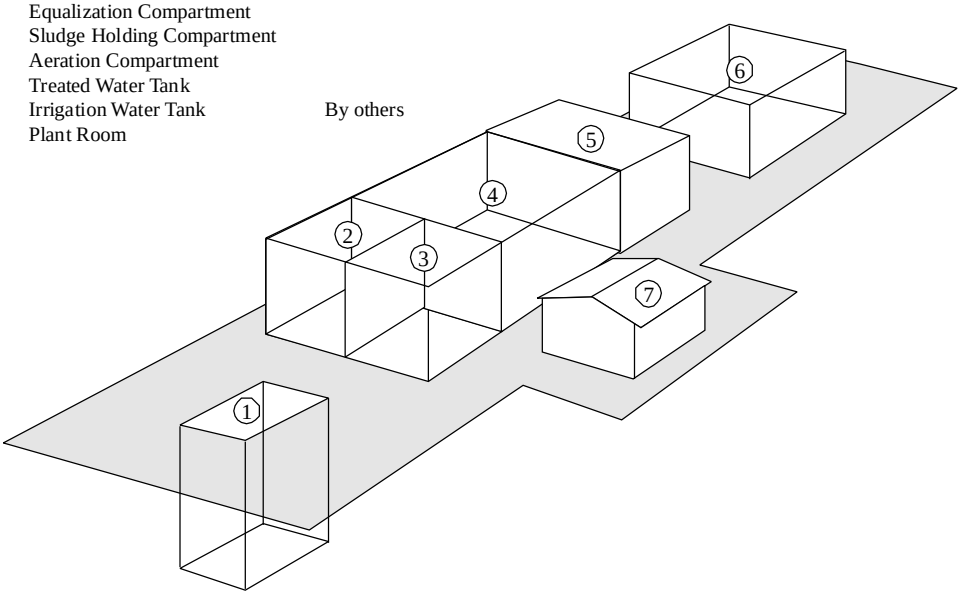
Rakeen Investment Co.

Ras al Khaimah/United Arab Emirates

Flow Capacity: 1000 cu m/day

Completed: 2007

1	Lift Station	By others
2	Equalization Compartment	
3	Sludge Holding Compartment	
4	Aeration Compartment	
5	Treated Water Tank	
6	Irrigation Water Tank	By others
7	Plant Room	



Rev	Description	Drawn	Date	Checked	Approved
	Revision				

epeco .gulf

Projection None | Scale None | Unit Meter

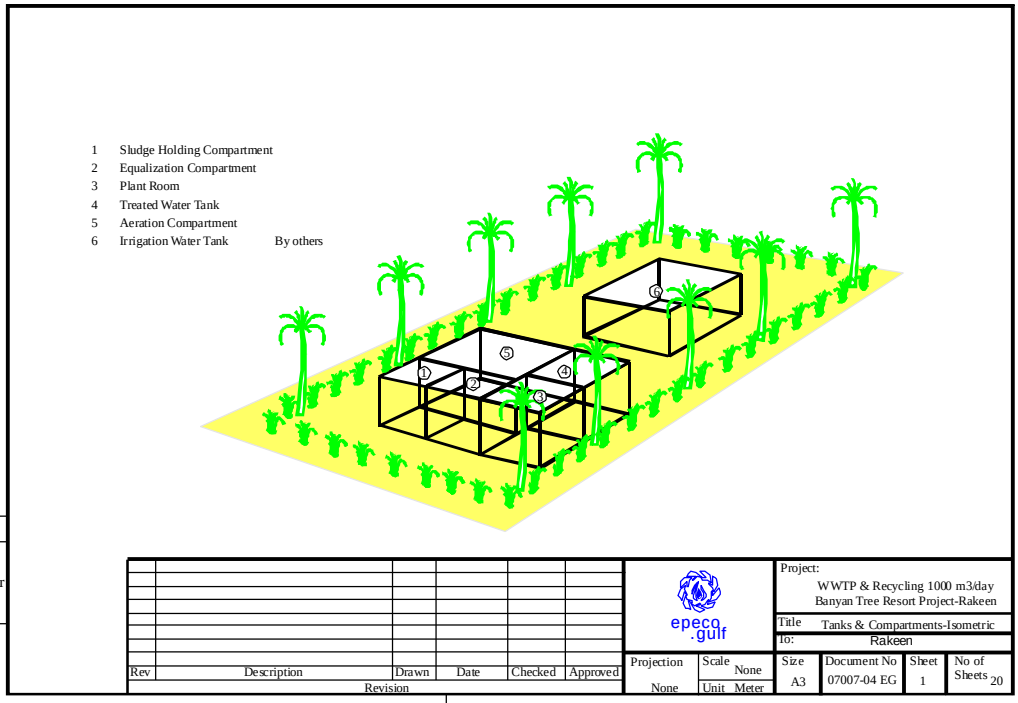
Project: WWTP & Recycling 1000 m3/day Banyan Tree Resort Project-Rakeen

Title: Tanks & Compartments-Isometric

To: Rakeen

Size	Document No	Sheet	No of Sheets
A3	07007-02 EG	1	20

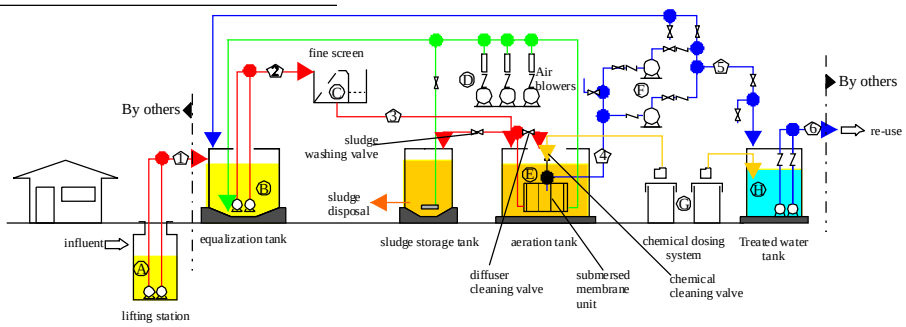
Wastewater Treatment & Reuse..... *contn'd*



A	2	1+1	lifting pumps	Optional
B	2	1+1	balancing pumps	
C	1	1	fine screen	
D	3	2+1	air blowers	
E	1	1	submersed member unit	
F	2	1+1	permeate pumps	
G	2	2	chemical dosing systems	
H	2	1+1	treated water pumps	

flow m^3/hr

pressure bar



Rev Description Drawn Date Checked Approved
Revision

epeco .gulf

Project: WWTP & Recycling 1000 m3/day Banyan Tree Resort Project-Rakeen
Title Process Flow Diagram
To: Rakeen
Projection None
Scale None
Unit Meter
Size A3
Document No 07007-01 EG
Sheet 1
No of Sheets 20

EPECO.USA designed and built a domestic wastewater treatment and recycling plant at Banyan Tree Resort, Ras al Khaimah, United Arab Emirates.

The WWTP based on EP.MBR 1000c design,f rom **EPECO.USA**, has been designed to serve the luxury resort of Banyan Tree. The average flow is 1000 cu m/day and the peak flow capacity is 125 cu m/hr.

The EP.MBR 1000c is built in 2 similar but independent streams which allows for work at 50% capacity any time. This is an important feature, especially in case of service stopping.

EP.MBR 1000c process has been enhanced by adding the **EPECO.USA** innovative "super nutrition" system, which allows the plant to operate at hydraulic loading as low as 15% and as high as 150% of the average.

Industrial Wastewater Treatment IWWTP & Reuse
EP.DAF 2000

EgyptAir Inflight Services
Sharm el Sheikh, Egypt
Completed: 2006
Capacity: 2000 cu m/day

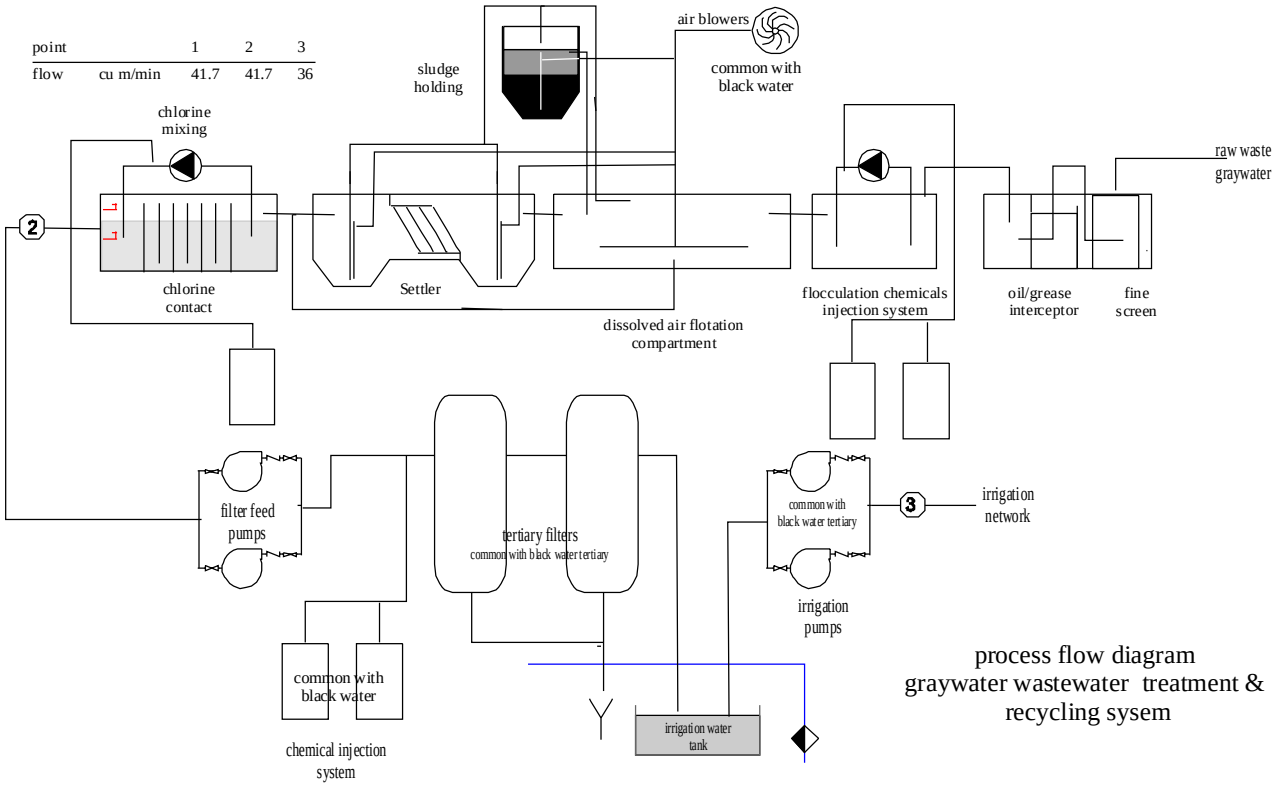
EPECO.USA Treatment and Recycling plant at Egypt Air Inflight Services Complex/Sharm el Sheikh Airport/Egypt.

The IWWTP based on EP.DAF 2000, the dissolved air flotation system and the specially designed settler & Fat, Oil & Grease FOG separator to meet the tough requirements of “industrial kitchen” operation. Biological treatment based on EP.SBR 2000c system follows the EP,DAF2000 for complete treatment.

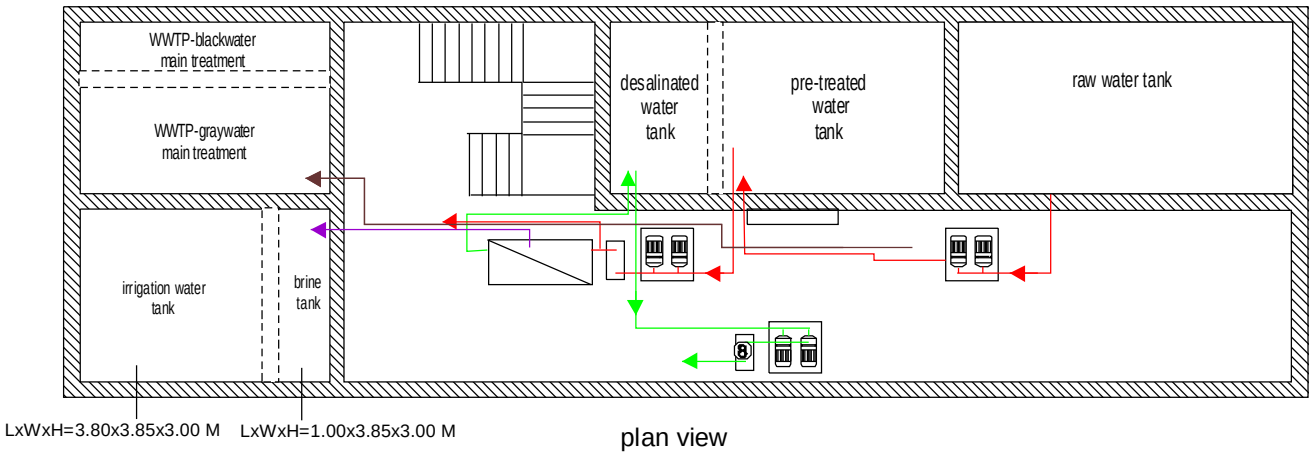
The IWWTP is built underneath the building. No smell, no odor or nuisance of any type what so-ever is noticed.

The IWWTP is producing-daily-hundreds of kilograms of waste grains (rice & wheat) and oil & grease in a solid form suitable sale. Clean effluent is either mixed with treated domestic wastewater for irrigation or as make-up water for the fire fighting system.

Industrial Wastewater Treatment IWWTP & Reuse.....*contn'd*
EP.DAF 2000



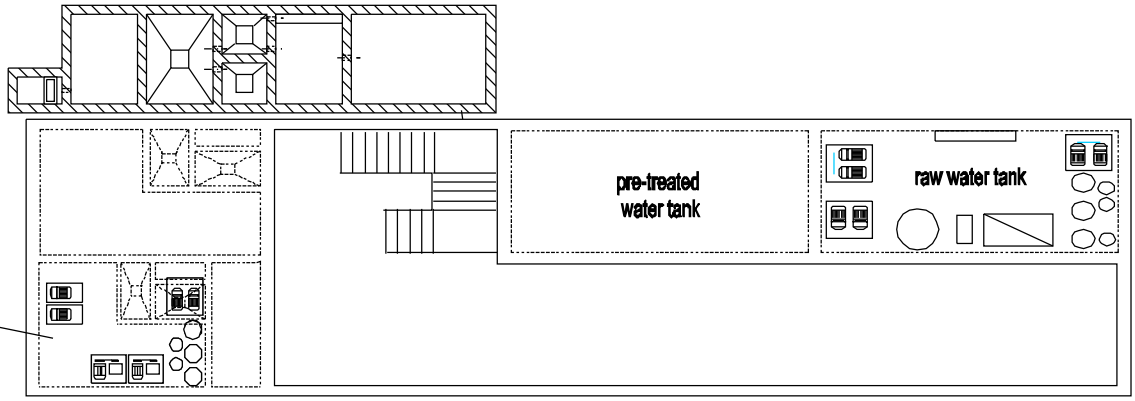
--	rev	drawn by		title	Wastewater treatment plant at sharm sharm el sheikh airport
0502068-01	drwng#	checked by			
meb	approved by	approved by meb	date 18/9/2005	to	talenco for engineering & contracting
18/9/2005	date	scale	none		
		original issue	18/9/2005	drwng# 0502068-2-03	rev -- epeco



1 raw water feed pumps
2 sand filter
3 chemical injection systems (pre-treatment)
4 activated carbon filter
5 Softener+salt tank
6 motor control center
7 desalinated water pumps
8 ultraviolet sterilizers (desalinated line)
9 pretreated water feed pumps
10 ultraviolet sterilizer (pre-treated water line)
11 RO system

--	rev	drawn by		title	Wastewater treatment plant at sharm sharm el sheikh airport
0502068-01	drwng#	checked by			
meb	approved by	approved by meb	date 18/9/2005	to	talenco for engineering & contracting
18/9/2005	date	scale	none		
		original issue	18/9/2005	drwng# 0502068-2-10	rev -- epeco

Industrial Wastewater Treatment IWWTP & Reuse.....*contn'd*
EP.DAF 2000



STP+IWWTP
rooms layout

important notes

these are not executional shopdrawings they're guidelines for construction works, all included data and dimensions must be checked and verified by the contractor prior to starting construction works.

drawings are not to scale

all dimensions in meters

as tanks are already existing, new holes will be arranged to allow for pipeworks to get in & out the tanks. The holes and the inserted sleeves to be located according to actual site conditions.

Furthermore, several manholes & ladders are required to ease access to tanks. Again these to be decided according to actual site conditions.

--	rev	drawn by		title	Wastewater treatment plant at sharm sharm el sheikh airport
0502068-01	drwng#	checked by			
meb	approved by	approved by meb	date 18/9/2005	to	talenco for engineering & contracting
18/9/2005	date	scale none			
		original issue	18/9/2005	drwng# 0502068-2-10	rev --

epeco

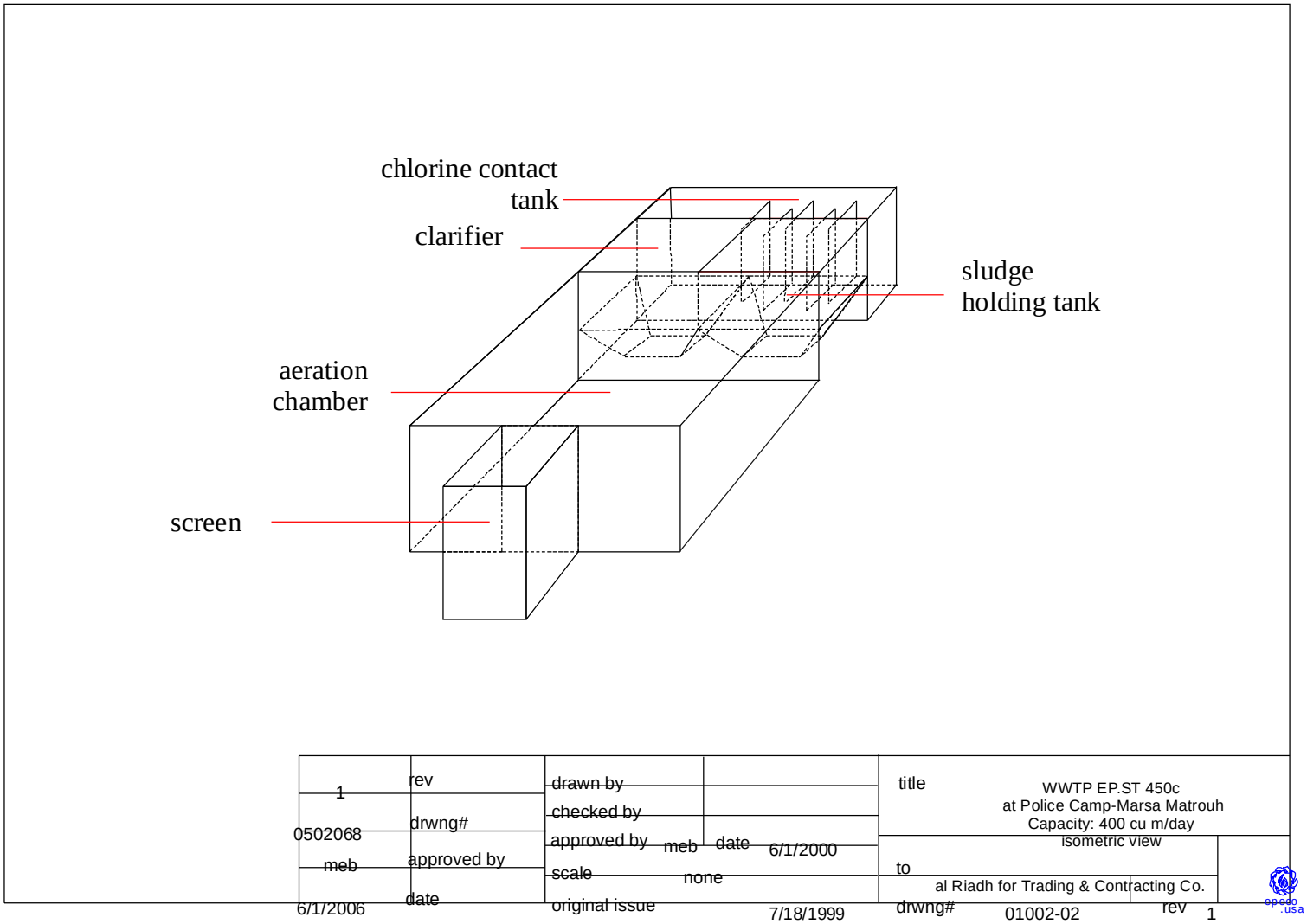
Wastewater Treatment Plant WWTP

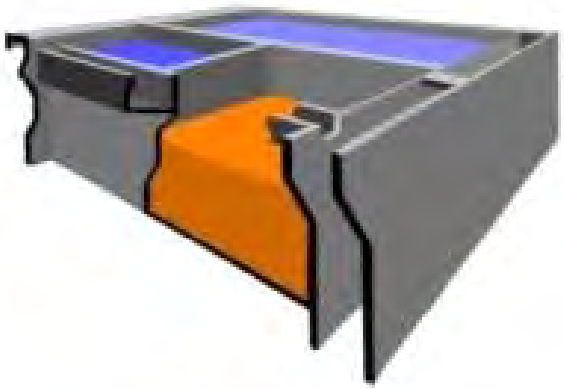
Police Resort

Marsa Matrouh, Egypt

Completed: 2000

Capacity Wastewater: 400 cu m/day

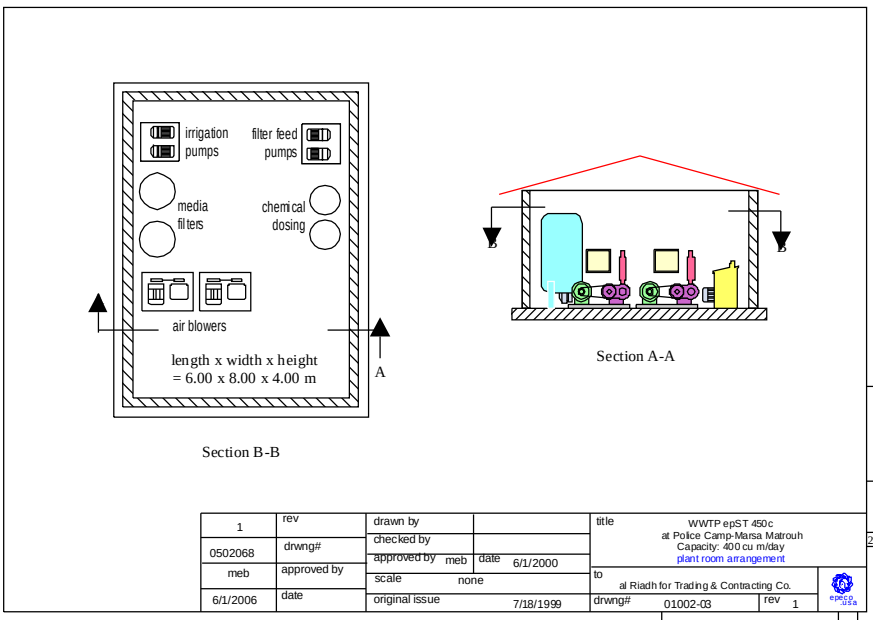


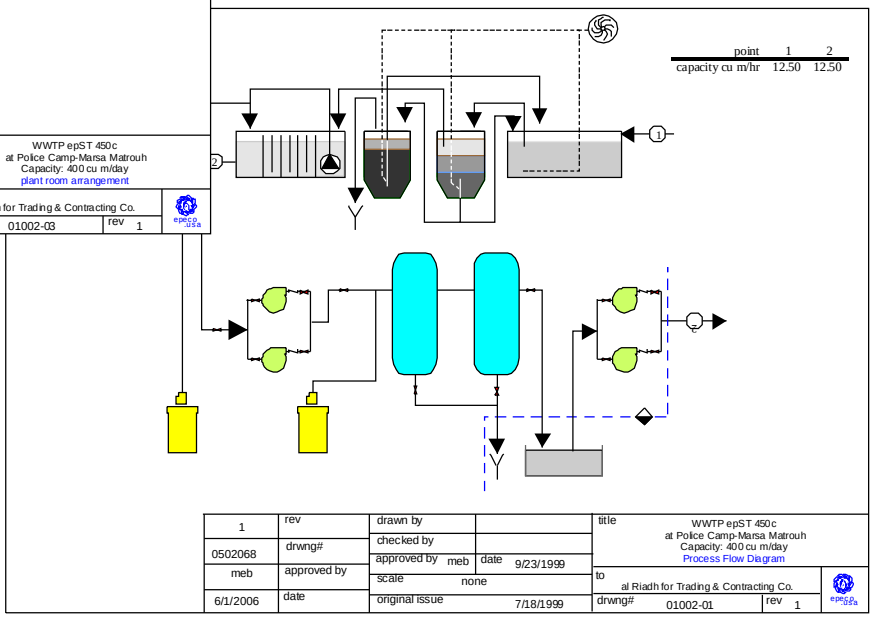


Wastewater Treatment Plant WWTP

EPECO.USA was awarded a contract to design and build a 450 cu m/day WWTP. **EPECO.USA** designed and built an EP.ST 400 c. . The EPST 400c can work with 150 % of its nominal capacity for 48 hours and at 12.5 % of its nominal capacity for 7 days with no sacrifice of product quality or economics.

To achieve this performance,**EPECO.USA** “super nutrition technology” has been implemented. This will satisfy the extremely varying hydraulic loads of a typical “summer time resort”. The EP.ST 400 c treated effluent quality with biochemical oxygen demand BOD5=5, chemical oxygen demand COD=5 and suspended solids SS=5 is always guaranteed. Product water is suitable for discharge into the open sea.

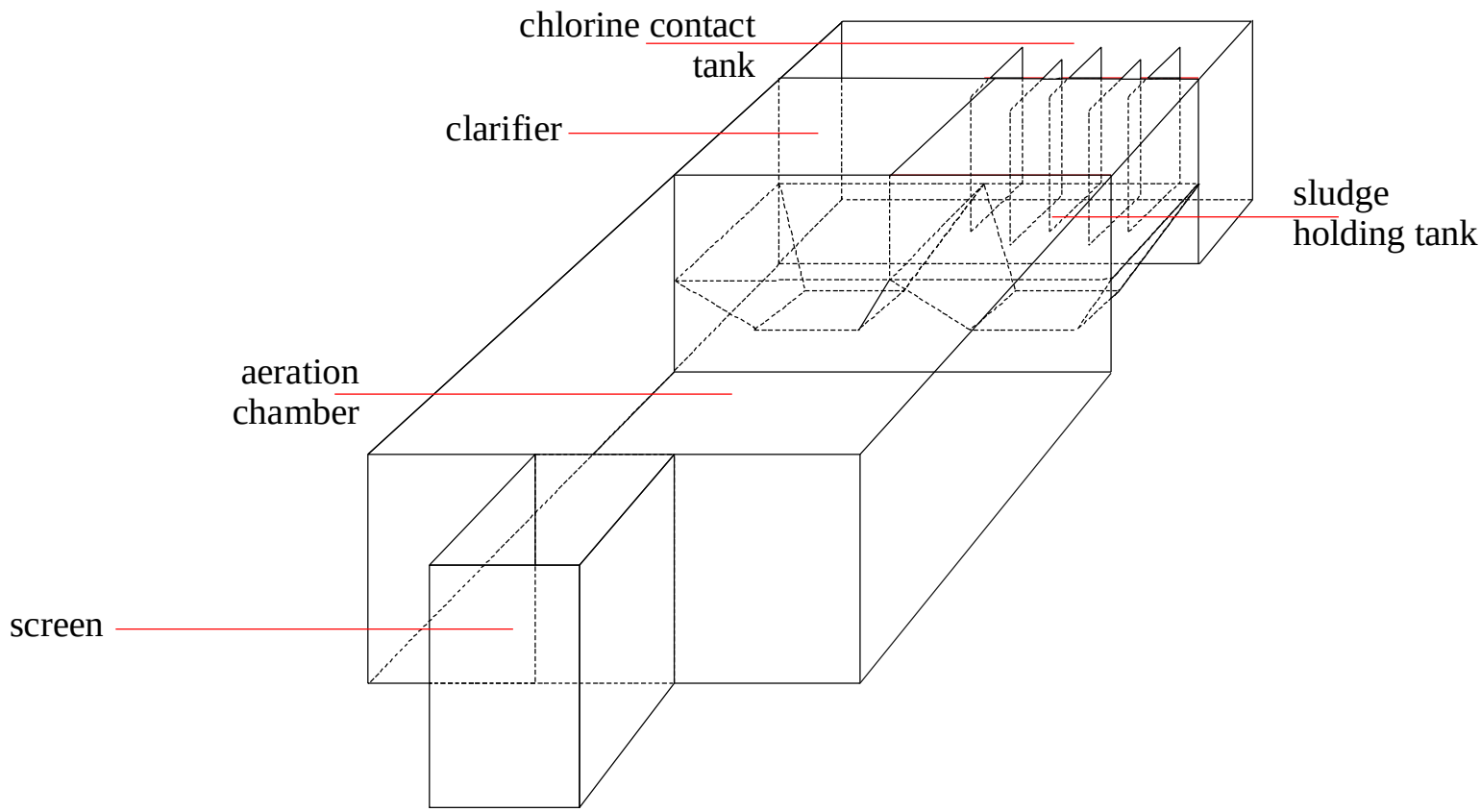




Wastewater Treatment Plant WWTP
GANTEC Housing Compound
At Orabi Farms, North Cairo, Egypt

Completed: 2000

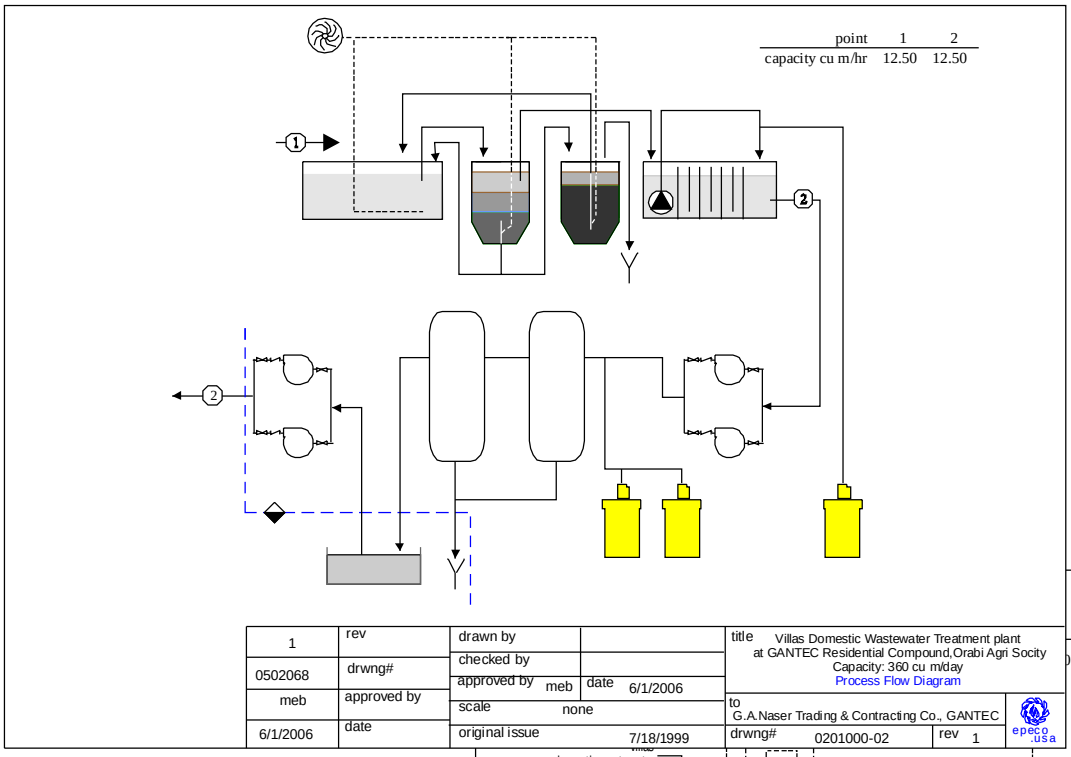
Capacity Wastewater: 360 cu m/day

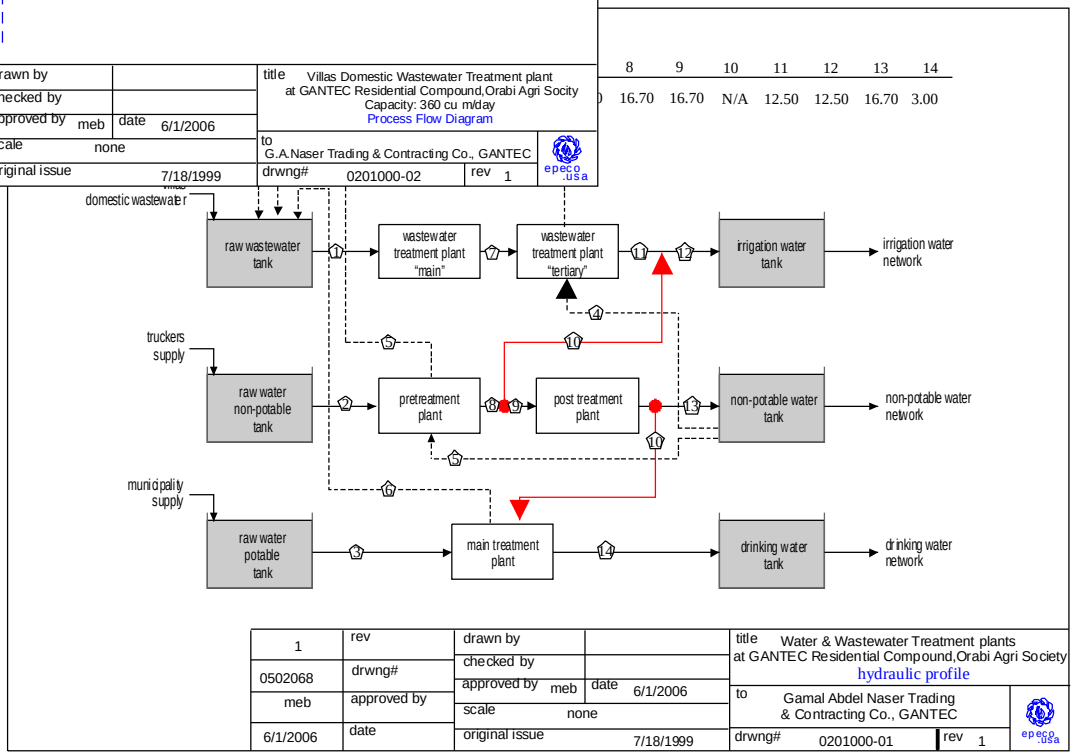


EPECO.USA designed, manufactured the systems and built a wastewater Treatment plant at GANTEC Housing Compound, at Orabi Farms, North Cairo, Egypt.

The WWTP based on **EPECO.USA**'s EP.SBR 400 c is redesigned to treat an average daily flow of 360 cu m consisting of nearly 300 cu m/day of domestic wastewater and 60 cu m/day of RO desalination system reject water , media filters backwash and rinse water. EP.SBR 400 c plant can work with 150 % of its nominal capacity for 48 hours and at 12.5 of its nominal capacity for 7 days with no sacrifice of product quality or economics. To achieve this performance, **EPECO.USA** "super nutrition technology" has been implemented.

Wastewater Treatment Plant WWTP..... *contn'd*





The EP.SBR 400 c treated effluent quality with biochemical oxygen demand BOD5=5, chemical oxygen demand COD=5 and suspended solids SS=5 is always guaranteed. Product water is suitable for irrigating delicate landscape and green tennis courts.

Wastewater Treatment Plant WWTP

Aramco

Dhahran, Saudi Arabia

Flow Capacity: 50 cu m/day/plant/Total 15

Completed: 1991

EPECO.USA designed, a unique residential wastewater treatment & reuse plant, working on Sequence Batch Reactor technology for use in villas, hotels, palaces, housing compounds, campuses, and construction sites.

As **EPECO.USA** was under incorporation that time, the plant was manufactured by Cromaglass Corp., Williamsport, Pennsylvania, USA. First unit model CA 50 was delivered and installed at Dhahran, Saudi Arabia. Several CA systems were delivered to customers in Saudi Arabia under the same program.

Egyptian Contract Allows Expansion At Local Factory

By ANN PAVLOVIC
Sun-Gazette Staff

A local manufacturer last week landed a contract with an Egyptian businessman who will provide developers in the Middle East with water treatment systems to protect the region's sparse fresh water from contamination.

That contract will also increase Cromaglass Corp.'s sales by two-thirds, said the company's president, Allan N. Young Jr.

As a result, Cromaglass Corp. has plans to expand its plant at the Williamsport Industrial Park during the next two or three months, and will add at least six more production positions to its staff of 12, Young said.

Young declined to discuss the privately-owned company's annual sales or the amount of the contract.

Cromaglass, founded in 1965, manufactures treatment systems small enough to treat water used by a small development of six to eight houses or small towns of up to 1,000 people, said Young. Additional capacity is added by linking several units, Young said.

Magdi M. El Beheiri, a partner of Environmental Projects and Engineering Co. (EPECO), said, Cromaglass' small water treatment systems are needed in areas where "officials are encouraging people to live outside the cities. This is one of the best products that can serve communities outside of a central municipal system."

"Because of the geography of the Middle East, people are crowding into cities," which has caused serious congestion problems, he said.

One such city is Cairo, Egypt, where the population is about 14 million, Beheiri said. Cairo is the home base of EPECO.

EPECO's goal is "to clean up the environment in the Middle East," thereby improving the quality of living for residents there, Beheiri said. "The environment is very polluted in the Middle East.

"We are mainly concerned with water quality and recycling wastewater right now," he said, adding that installing one efficient treatment system "means we have one environmentally clean spot in the Middle East."

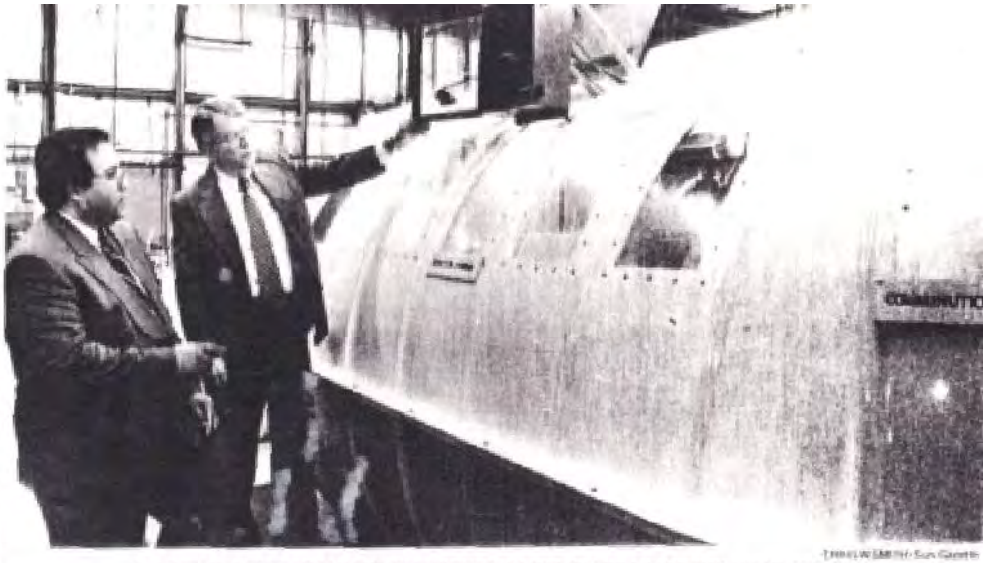
Beheiri also hopes to sell Cromaglass systems to some of the 200 resorts that have been proposed along the shores of the Red and Mediterranean Seas, he said.

That water can then be recycled and used for such uses as irrigation and firefighting.

Recycled wastewater was used to create a man-made lake at one resort center, Beheiri said. "It is really expensive to do it, but it is worth conserving our water resources," Beheiri said.

Young said EPECO will also market the systems in Kuwait, where an international coalition is working to rebuild the small country recently devastated by Iraqi forces and later by U.S.-led allied forces driving the Iraqis out.

"We would help with the (country's) reconstruction by supplying systems to outlying areas," Young said. "They do need us there," he said, adding that the systems would be suitable for temporary settlements for troops and the battery of consultants and technical experts because the durable, fiberglass systems can be easily transported to a new location.



EGYPTIAN BUSINESSMAN MAGHEL BEHEIRI, LEFT, TALKS ABOUT THE APPLICATIONS ... of a Cromaglass water treatment system with Frank Maltz, the local firm's vice president

EPECO, which Beheiri said may be the only company based in the Middle East that provides such a comprehensive package of environmental services, also markets the environmentally oriented products of about a dozen other companies, Beheiri said. The company's current emphasis is on water quality and "recycling," or reusing wastewater, Beheiri said.

Beheiri said EPECO is involved in organizing a consortium of businesses to build 46 municipal sewage treatment plants, which at a projected cost of $500 million one of the biggest projects ever in the Middle East. The smallest of those municipalities is about the size of Williamsport, he said.

That project will cleanse about 250 million gallons of water per day, enough to grow a million acres of wheat, Beheiri said, noting that wastewater recycling could drastically reduce the region's reliance on imported food. In Egypt, about 40 to 65 percent of the wheat is imported, Beheiri said.

Many Middle Eastern countries have been implementing environmental regulations during the last several years similar to the ones established in the United States during the 1970s, Beheiri said.

"This is the right way of doing business — filling the gap between regulations and the application of regulations," Beheiri said.

Beheiri believes the five-year-old company will see business continue to expand at about 25 percent annually as it has for the last several years. He expects that expansion to continue through the 1990s, although profits might not increase at the same pace as overall sales, he said.

EPECO has four branch offices and plans to add six more in the next two years, Beheiri said.

Young said the Middle East, mostly in Saudi Arabia, comprised about 50 percent of Cromaglass' business in the late 1970s, but that figure lagged when development needs waned.

Still, exports have comprised about half of the company's business during the last six or seven years, thanks to word of mouth from satisfied customers, Young said.

CROMAGLASS Corporation
P.O. Box 3215 • Williamsport, PA 17701
(717) 326-3396 • Fax (717) 326-6425

EPECO.USA WWTP Experience & Reference List
Updated Sept. 2022

Project	Type	Capacity	Client	Year
Wastewater Treatment & Reuse Plant/ Aramco/Dhahran/ SEPEC/Saudi Arabia/ Cromaglass/USA	SBR+ Media Filtration +UV Sterilization + Chlorination	5 x 20 m^3/day	Saudi Arabia	1991
Wastewater Treatment Plant/ Gantec Compound/ Orabi Resort/North Cairo/Egypt/ EPECO.USA/Egypt	SBR+ Media Filtration +UV Sterilization + Chlorination	360 m^3/day	Egypt	2000
Wastewater Treatment & Reuse Plant at Food Ruckers Restaurants/ Cairo/Egypt/ EPECO.USA/Egypt	SBR +UV Sterilization Chlorination	2x 200 m^3/day	Cairo/ Egypt	2000
Wastewater Treatment & Reuse Plant at Police Department Resort at Marsa Matrouh/Egypt/ EPECO.USA/Egypt	SBR +UV Sterilization + Chlorination	400 m^3/day	Egypt	2000
Wastewater Treatment & Reuse Plant at al Waha Bottling Plant/Wadi el Fariegh/Egypt EPECO.USA/Egypt	SBR +UV Sterilization + Chlorination	200 m^3/day	Egypt	2004
Wastewater Treatment & Reuse Plant at Royal Paradise Resort/Sharm el sheikh/Egypt EPECO.USA/Egypt	SBR +UV Sterilization + Chlorination	1200 m^3/day	Egypt	2004
Wastewater Treatment & Reuse Plant at Southeast University. Nanjing/ China/ KHONG/China	Anoxic + Aerobic+MBR	30 m^3/day	China	2005
Industrial Wastewater Treatment Plant(Food Processing) at Yimao, Ningbo, China/ KHONG/China	Anerobic+Aerobic+ MBR	72 m^3/day	China	2005

EPECO.USA

Industrial Wastewater Treatment Plant (Food Processing) at YangYang Bean Industry Shanghai, China/ KHONG/China	Anerobic+Aerobic+ MBR	120 m^3/day	China	2005
Industrial Wastewater Treatment Plant (Food Processing) at Huang Jia Du Bean Products, Shanghai/China/ KHONG/China	Anerobic+Aerobic+ MBR	192 m^3/day	China	2005
Industrial Wastewater Treatment Plant (Chemicals Manufacturing) at Southern China Chemical Factory, Taizhou/ China/ KHONG/China	Anerobic+Aerobic+ MBR	120 m^3/day	China	2005
Wastewater Treatment & Reuse Plant at Hebei The First Prison, China/ KHONG/China	Anoxic + Aerobic+MBR	360 m^3/day	, China	2005
Wastewater Treatment & Reuse Plant at Jutai Textile Factory, Xiamen, China/ KHONG	Anoxic + Aerobic+MBR	300 m^3/day	China	2005
Wastewater Treatment & Reuse Plant/ EgyptAir Inflight Service Center/Sharm el Sheikh/Egypt EPECO.USA/Egypt	SBR+ Media Filtration +UV Sterilization + Chlorination	300 m^3/day	Egypt	2006
Industrial Wastewater Treatment& Reuse Plant / EgyptAir Inflight Service Center/Sharm el Sheikh/Egypt EPECO.USA/Egypt	SBR+ Media Filtration +UV Sterilization + Chlorination	2000 m^3/day	Egypt	2006
Wastewater Treatment & Reuse Plant at Areej Resort, Sokhna, Egypt/ EPECO.USA/Egypt	Anoxic + Aerobic+MBR +UV Sterilization + Chlorination	400 m^3/day	Egypt	2006

epecousa

Wastewater Treatment & Reuse Plant at WF Housing Compound at Orabi Resort, Cairo/Egypt/ EPECO.USA/Egypt	SBR +UV Sterilization + Chlorination	100 m^3/day	Egypt	2006
Wastewater Treatment & Reuse Plant at Kunming Wuhua Square, Yunnan, China/ KHONG/China	Anoxic + Aerobic+MBR	40 m^3/day	China	2006
Wastewater Treatment & Reuse Plant at Shenzhen Polytechnic, China/ KHONG/China	Anoxic + Aerobic+MBR	120 m^3/day	, China	2006
Industrial Wastewater Treatment Plant (Wash Water) at Xinchen Medical Supplies Wash Company, Nantong, China/ KHONG/China	Anerobic+Aerobic+ MBR	120 m^3/day	China	2006
Industrial Wastewater Treatment Plant(Chemical Manufacturin) at, Huiteng Oil Chemical Industry, Zibo, China/ KHONG/China	Anerobic+Aerobic+ MBR	240 m^3/day	China	2006
Medical Wastewater (Hospital) Treatment Plant at Gaoxiong Diyi Environmental Protection, Taiwan/ KHONG/China	Anerobic+Aerobic+ MBR	240 m^3/day	Taiwan	2006
Industrial Wastewater Treatment Plant (Chemicals Manufacturing) at Changzhou Huasheng Fine Chemical Industry, Jiangsu, China/ KHONG	Anerobic+Aerobic+ MBR	360 m^3/day	China	2006
Industrial Wastewater (Coking) Treatment Plant at Hebei Qian'an Coking Plant, China/ KHONG/China	Anerobic+Aerobic+ MBR	360 m^3/day	China	2006

Wastewater Treatment & Reuse Plant at Gulangyu Demo STP, Xiamen, China/ KHONG/China	Anoxic + Aerobic+MBR	600 m^3/day	China	2006
Wastewater Treatment & Reuse Plant at Kunming Qing Shui Mu Hua Residential Zone/China/ KHONG/China	Anoxic + Aerobic+MBR	560 m^3/day	China	2006
Industrial Wastewater Treatment Plant (Food Processing) at Shanghai Pu Zhan Hong Food Factory, China/ KHONG/China	Anerobic+Aerobic+ MBR	312 m^3/day	China	2006
Industrial Wastewater Treatment Plant (Food Processing) at Xiamen Tairi Food Company,China/ KHONG/China	Anerobic+Aerobic+ MBR	300 m^3/day	China	2006
Industrial Wastewater (Landfill Leachate) Treatment Plant at Jingjiang Landfill, China/ KHONG/China	Anerobic+Aerobic+ MBR	30 m^3/day	China	2007
Industrial Wastewater Treatment Plant of Landfill Leachate at Huaihua The Second Landfill, China/ KHONG/China	Anerobic+Aerobic+ MBR	200 m^3/day	China	2007
Industrial Wastewater (Landfill Leachate) Treatment Plant at China Resources Group Chemical Industry Factory,Shandong, China/ KHONG/China	Anerobic+Aerobic+M BR	1000 m^3/day	China	2007
Industrial Wastewater (Landfill Leachate) Treatment Plant at Huaihua The Second Landfill, China/ KHONG/China	Anerobic+ Aerobic+ MBR	200 m^3/day	China	2007

Industrial Wastewater (Textile) Treatment Plant at Amani, Xiamen, China/ KHONG/China	Anerobic+Aerobic+ MBR	650 m^3/day	China	2007
Industrial Wastewater (Leather Processing) Treatment Plant at Huaxia Hill Company, Xiamen, China/ KHONG/China	Anerobic+Aerobic+ MBR	360 m^3/day	China	2007
Wastewater Treatment & Reuse Plant at Nanlian Highway Service Zone, Nanjing, China/ KHONG/China	Anoxic+Aerobic+ MBR	240 m^3/day	China	2007
Medical (Hospital) Wastewater Treatment Plant at Laoshan Center of disease control and prevention, Qingdao, China/ KHONG/China	Anerobic+Aerobic+ MBR	200 m^3/day	China	2007
Industrial Wastewater (Pharmaceutical) Treatment Plant of Wastewater at Nanyang Pukang Pharmacy,Henan, China/ KHONG/China	Anerobic+Aerobic+ MBR	3000 m^3/day	China	2007
Industrial Wastewater (Leather Processing) Treatment Plant at Huizhou Leather Factory, China/ KHONG/China	Anerobic+Aerobic+ MBR	2500 m^3/day	China	2008
Industrial Wastewater (Landfill Leachate)Treatment Plant at Hangzhou Jinjiang Group Garbage Power Plant, China/ KHONG/China	Anerobic+Aerobic+ MBR	300 m^3/day	China	2008
Industrial Wastewater (Pharmaceutical) Treatment Plant at Jinri Pharmacy, Xiamen, China/ KHONG/China	Anerobic+Aerobic+ MBR	300 m^3/day	China	2008

Industrial Wastewater (Chemicals-Scenic) at OCT East, Shenzhen, China/ KHONG/China	Anerobic+Aerobic+ MBR	3000 m^3/day	China	2008
Industrial Wastewater (Pharmaceutical) Treatment Plant at AstraZeneca Pharmacy, Wuxi, China/ KHONG/China	Anerobic+Aerobic+ MBR	300 m^3/day	China	2008
Medical (Hospital) Wastewater Treatment Plant of Nanshan District Center of Disease Control and Prevention, Shenzhen, China/ KHONG/China	Anerobic+Aerobic+ MBR	60 m^3/day	China	2008
Industrial Wastewater (Printing & Dyeing)Treatment Plant at Zhangjiagang Printing and Dyeing Factory, Jiangsu, China/ KHONG/China	Anerobic+Aerobic+ MBR	10000 m^3/day	China	2008
Medical (Hospital) Wastewater Treatment Plant of Guigang Hospitals, Guangxi, China/ KHONG/China	Anerobic+Aerobic+ MBR	1000 m^3/day	China	2008
Industrial Wastewater (Pharmaceutical) Treatment Plant at Xiamen Chinese Medicine Factory, China/ KHONG/China	Anerobic+Aerobic+ MBR	1200 m^3/day	China	2009
Industrial Wastewater (Chemical) Treatment Plant at China Resources Group Chemical Industry Factory,Shandong, China/ KHONG/China	Anerobic+Aerobic+ MBR	1200 m^3/day	China	2009
Wastewater Treatment & Reuse Plant at Beijing Occupation Technical School, China/ KHONG/China	Anoxic+Aerobic+ MBR	2500 m^3/day	China	2009

epecousa
[illegible]

Medical (Hospital) Wastewater Treatment Plant of Xian Center Hospital, China/ KHONG/China	Anerobic+Aerobic+ MBR	1000 m^3/day	China	2010
Industrial Wastewater (Chemicals) Treatment Plant at Plastic Factory, Xiamen Mingda Group, China/ KHONG/China	Anerobic+Aerobic+ MBR	1000 m^3/day	China	2010
Medical (Hospital) Wastewater Treatment Plant of Jinzhou District Center of Disease Control and Prevention, Ningbo, China/ KHONG/China	Anerobic+Aerobic+ MBR	300 m^3/day	China	2010
Industrial Wastewater (Salaughter House) Treatment Plant at Yulin Slaughtering and Meat Processing Factory, Guangxi, China/ KHONG/China	Anerobic+Aerobic+ MBR	200 m^3/day	China	2010
Industrial Wastewater (Pharmaceutical)Treatment Plant at Lukerkong Biotech Plant,Guangdong, China/ KHONG/China	Anerobic+Aerobic+ MBR	720 m^3/day	China	2010
Industrial Wastewater (Landfill Leachate) Treatment Plant at Tiancheng Environmental, Shanghai, China/ KHONG/China	Anerobic+Aerobic+ MBR	100 m^3/day	China	2010
Wastewater Treatment & Reuse Plant at Qin Shi Huang Mausoleum Scenic Zone, Xian, China/ KHONG/China	Anoxic+ Aerobic+ MBR	360 m^3/day	China	2010
Industrial Wastewater (Printing & Dyeing) Plant at Zhuji Printing and Dyeing Factory, Zhejiang, China/ KHONG/China	Anerobic+ Aerobic+ MBR	600 m^3/day	China	2010

Wastewater Treatment & Reuse Plant at Sokna Port/Egypt/ ENSOL EPECO USA/Egypt	Anoxic + Aerobic+MBR+ Chlorination	200 m^3/day	Egypt	2011
Wastewater Treatment & Reuse Plant at Huizhou Industrial Zone, China/ KHONG/China	Anoxic+Aerobic+MBR	700 m^3/day	China	2011
Industrial Wastewater (Landfill Leachate) Treatment Plant at Guiyang Lanfill/China/ KHONG/China	Anerobic+Aerobic+MBR	200 m^3/day	China	2011
Wastewater Treatment & Reuse Plant at Chevron Oil Blending Plant/ 6th of October/Egypt/ ENSOL EPECO USA/Egypt	Anoxic + Aerobic+MBR+ Chlorination	20 m^3/day	Egypt	2013
Wastewater Treatment & Reuse Plant at Red Sea Port Authorities Hurghada Port/Egypt/ Arabian Org. for Industrialization/Egypt	Anoxic + Aerobic+MBR	200 m^3/day	Egypt	2017

epecousa
[illegible]

Water Treatment Plants & Equipment

Reverse Osmosis Desalination Plant
EP.RO 50 m

EgyptAir Inflight Services
Sharm el Sheikh, Egypt
Completed: 2006
Capacity: 50 cu m/day

EPECO.USA installed its manufactured desalination plant EP.RO 50m at EgyptAir Inflight Services Complex/Sharm el Sheikh Airport/Egypt. The product water is additionally sterilized by

EPECO.USA's Ultraviolet system UV.INDU 50 then used for cooking.

The brine water is returned to the final effluent tank.

Water Treatment Plant WTP
E.PURE 2500

EgyptAir Inflight Services
Sharm el Sheikh, Egypt
Completed: 2006
Capacity: 2410 cu m/day

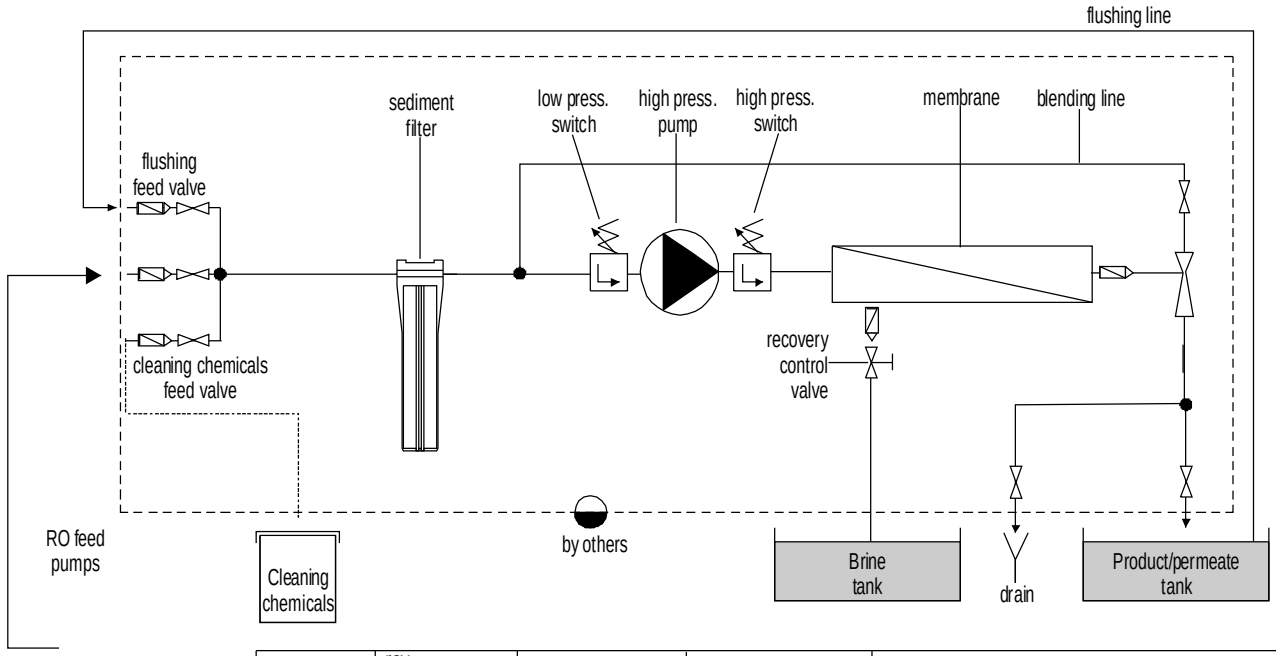
EPECO.USA designed and built a water Treatment plant at EgyptAir Inflight Services Complex/Sharm el Sheikh Airport/Egypt.
The WTP is based on **EPECO.USA**'s E.PURE system producing nearly 2500 cu m/day of potable water for domestic and industrial applications along with 75 cu m/day of Reverse Osmosis desalination feed. Rinse water from the E.PURE system is collected in industrial wastewater tank.

Water Treatment Plant WTP*.....contn'd*
E.PURE 2500

RO main treatment stage
P & I Diagram

point			1	2	3
flow	ave.	liter/hr	33.4	16.7	16.7
TDS	max.	mg/l	500	150	850

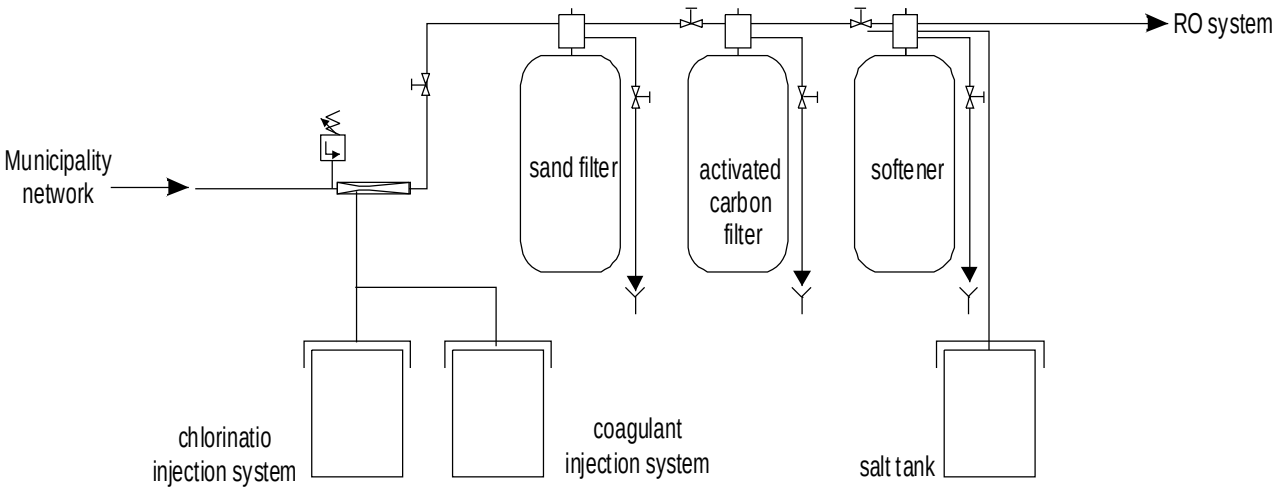
press.		P1	P2	P4
max.	kpa	200	20	1600
min.	kpa	50	20	800



--	rev	drawn by		title	water treatment plant at sharm sharm el sheikh airport
0502068-1-01	drwng#	checked by			
meb	approved by	approved by meb	date 18/9/2005	to	talenco for engineering & contracting
18/9/2005	date	scale none			
		original issue 18/9/2005		drwng# 0502068-1-01	rev –

epeco

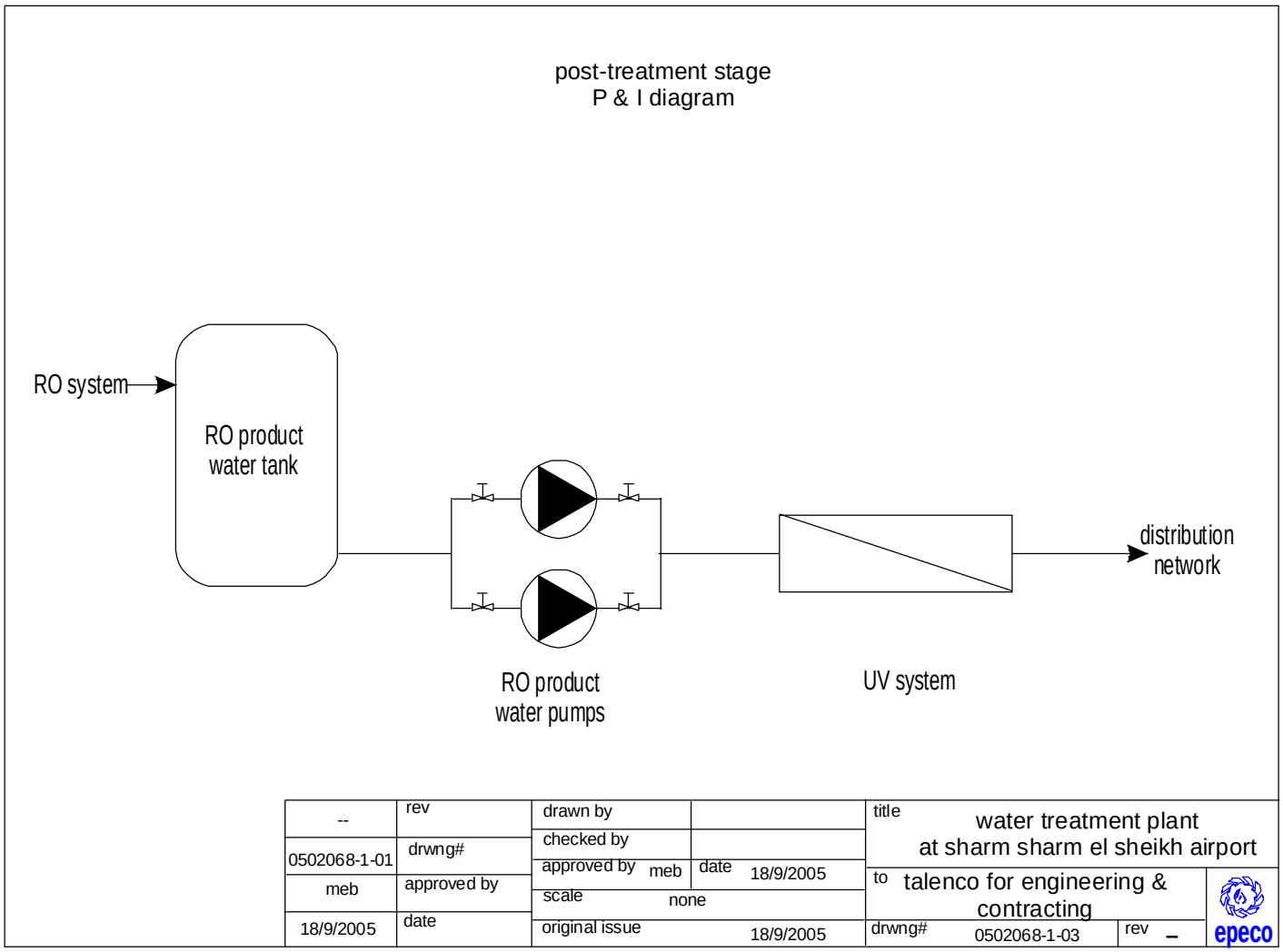
pretreatment stage
p & i diagram



--	rev	drawn by		title	water treatment plant at sharm sharm el sheikh airport
0502068-1-01	drwng#	checked by			
meb	approved by	approved by meb	date 18/9/2005	to	talenco for engineering & contracting
18/9/2005	date	scale none			
		original issue 18/9/2005		drwng# 0502068-1-02	rev –

epeco

Water Treatment Plant WTP*.....contn'd*
E.PURE 2500



Industrial Water Filtration System EP.FILTRA 350 b&S+EP.UV indu 350

MAC Carpet Co.
10th of Ramadan, Egypt
Completed: 2005
Capacity: 500 cu m/day

EPECO.USA was awarded a contract to design, manufacture and install an industrial water treatment system with average daily capacity 500 cu m/day.
The industrial water treatment system consists of back washable filtration system EP.FILTRA 350 b followed by micro sediment filtration system EP.FILTRA 350 s. The EP.FILTRA 350 b can filtrate 21 cu m/hr of industrial water up to 50 microns quality. The EP.FILTRA 350 b work cycle includes automatic (time and/or pressure drop) operate, backwash and rinse. The system has 3 independent parallel streams which allows for cleaning & rinsing one stream while other streams are in "operate" mode.
The EP.FILTRA 350 s can filtrate 21 cu m/hr up to 5 microns quality. As soon as the EP.FILTRA 350 s cartridges are blocked (differential pressure monitored), cartridges can be easily replaced. The replacement process can be carried-out in one stream while other streams are in "operate" mode.
Filtered water is sterilized by **EPECO.USA**'s model EP.UVindu 350, which produces germ free water for delicate industrial applications.

Water & Wastewater Treatment Plants
EP.SBR 350c+EP.MF 400+EP.Filtra 100++EP.UV 100

GANTEC Housing Compound
At Orabi Farms, North Cairo, Egypt

Capacity Wastewater: 360 cu m/day
Capacity non-potable water: 410 cu m/day
Capacity drinking water: 72 cu m/day
Completed: 2000

EPECO.USA designed and built a combined water & Wastewater at GANTEC Housing Compound at Orabi Farms, North Cairo, Egypt. The compound consists of 8 villas built on a 64'750 sq. m green area.

Each Villa has family & kids swimming pools, green tennis court and landscape. As public infrastructure was not available, it was necessary to optimize the water consumption to the best. Non-potable water is filtered and sterilized for non-potable applications (cleaning cars, flushing toilets, washing floors, swimming pools and fountains). Potable-water is treated up to the drinking quality via Reverse Osmosis RO desalination system. Domestic wastewater alongwith the RO reject and filtration system backwash & rinse water are mixed and biologically treated up to irrigation quality. The system is designed to allow for feeding the RO system from the available limited fresh (potable) water supplies (trucks). Treated non potable water may be automatically by-passed to feed the RO system. The total system is considered an early ZERO liquid waste discharge system.

Water Treatment System for Battle Field
ROWPU 3000-1991

Allied Forces, Gulfware II

15x EP.ROWPU 3000

Flow Capacity:272 cu m/day/each

Completed 1991

EPECO.USA manufactured (via MECO Inc-New Orleans-Louziana/USA) and supplied 7 x EP.ROWPU 3000 to the Allied Forces in Saudi Arabia during the Gulf War II operations. All ROWPU's are equipped with NBC Nuclear, Biological and Chemical decontaminators that allow consistent operations under harsh massive destruction warfare. The Saudi partner of EPECO.USA (SEPEC-Saudi environmental Projects & Engineering Co. Ltd.) was the prime contract. SEPEC was awarded an O & M contract for the total 15 ROWPU's.

Water Packaging System for Battle Field
WaterLine/Saudi Arabia 1991

Allied Forces, Gulfware II

7x E.PURE 300

Flow Capacity:272 cu m/day/each

Completed 1991

EPECO.USA manufactured(via Water Line S.A-Mezzovico-Lugano/Switzerland) and supplied 15 x E.PURE 300 self autonomous Water Treatment and Packaging plants to the Allied Forces in Saudi Arabia during the Gulf War II operations. E.PURE 300 plants were designed to work jointly with the battle field water desalination plants-EP.ROWPU 3000.

Each E.PURE 300 plant can supply 1-1.2 million water bags (200-300 cc each) treated for long lasting and to serve under the NBC Nuclear, Biological and Chemical attacks.

EPECO.USA WTP Experience List
Updated Oct. 2022

Project/Client/Manufacturer	Application	Capacity	Country	Year
Portable Water Packaging Plants for Battle Field/SEPEC/MODA-Saudi Arabia/ WaterLine/Switzerland	Water Packaging/ Portable	15 x 271 m^3/day each	Saudi Arabia	1992
Portable Water Treatment Plants ROWPU for Battle Field-SEPEC/MODA-Saudi Arabia/SEPEC/Saudi Arabia/ MECO/USA	Seawater/ Brackish Water Desal.+ Nuclear, Biological & Chemical NBC decont-aminators	15 x 271 m^3/day each	Saudi Arabia	1992
Portable Water Treatment Plants ROWPU for Battle Field-EPECO.USA/Egypt	Seawater/ Brackish Water Desal.+ Nuclear, Biological & Chemical NBC decont-aminators	3 x 300 m^3/day each	Egypt	1995
Water Treatment Plant/ Egyptian Silos/Mansourah/Egypt/ EPECO.USA/Egypt	Micro filtration+ UV Sterilization	2,000 m^3/day	Egypt	1998
Water Treatment Plan/Gantec Contracting/ Orabi Resort/North Cairo/Egypt/ EPECO.USA/Egypt	Media & Micro Filtration+UV Sterilization + Chlorine"in" Situ + Conditioning + Desalination	Non-potable-410 m^3/day Desalin-ated-72 m^3/day	Egypt	2000

Water Treatment Plant/ SharafChem Ind/10th of Ramadan/Egypt/ EPECO.USA/Egypt	UV Sterilization + RO Desalination	50 m^3/day	Egypt	2003
Process Water Treatment/Pure Water Tech. WLL/Qatar/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	999 m^3/day	Qatar	2004
Process Water Treatment/ Universal Robina Corporation/ Philippines/ Pure Aqua Inc, USA	RO+ Pre & Post Treatment	1,079 m^3/day	Philippines	2004
Potable Water Treatment/ Turkey/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	757 m^3/day	Turkey	2004
Water Filtration & Conditioning/MAC Carpets/10th of Ramadan/Egypt/ EPECO.USA/Egypt	Micro Filtration +UV Sterilization	500 m^3/day	Egypt	2005
Water Treatment Plant at el Salam Poultry Farm/el Salehia el Gadida/Egypt/ EPECO.USA/Egypt	Dissolved Air Flottation+Media & Micro filtration+ Chlorination+ UV Sterilization	500 m^3/day	Egypt	2005
Water Treatment Plant/EgyptAir Inflight Service Center/Sharm el Sheikh/Egypt/ EPECO.USA/Egypt	Media & Micro Filtration, UV Sterilization + Chlorination + Conditioning	2,420 m^3/day	Egypt	2006
Reverse Osmosis Desalination Plant /EgyptAir Inflight Service Center/Sharm el Sheikh/Egypt/ EPECO.USA/Egypt	RO Desalniation	50 m^3/day	Egypt	2006

Reverse Osmosis Desalination Plant/ Tabarak Ind/10th of Ramadan/Egypt/ EPECO.USA/Egypt	UV Sterilization + RO Desalination	32 m^3/day	Egypt	2006
Sea Water Desalination Plant/ Marsa Alam/ Egypt/ USSU/Turkey	SWRO	500 m^3/day	Egypt	2006
Sea Water Desalination Plant/ Cancun/ Mexico / USSU/Turkey	SWRO	2x400 m^3/day	Mexico	2006
Arsenic Removal Plant/ Isuzu/Izmir/Turkey/ USSU/Turkey	Arsenic Filter	300 m^3/day	Turkey	2006
Iron & Manganese Removal Plant/ İl Özel İdare-Mugla / Turkey/ USSU/Turkey	Iron & Manganese Filter	350 m3/day	Turkey	2006
Process Water Treatment/ Caterpillar Inc./USA Pure Aqua Inc, USA	RO+ Pre & Post Treatment	492 m^3/day	USA	2006
Reverse Osmosis Desalination Plant/ Ersu-Kemerburgaz / Turkey/ USSU/Turkey	BWRO	350 m^3/day	Turkey	2007
Reverse Osmosis Desalination Plant at Serinsu-Çatalca(Spring)/Turkey/ USSU/Turkey	BWRO	550 m^3/day	Turkey	2007
Iron & Manganese Removal Plant/İl Özel İdare-Mugla / Turkey/ USSU/Turkey	Iron & Manganese Filter	200 m^3/day	Turkey	2007
Process Water Treatment/ Pakistan Agent/ Pakistan/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	1,893 m^3/day	Pakistan	2007
Process Water Treatment/ UAE Agent/ UAE Pure Aqua Inc, USA	RO+ Pre & Post Treatment	1,363 m^3/day	UAE	2007
Process Water Treatment/ OLS Energy-Camarillo/ USA/ Pure Aqua Inc, USA	RO+ Pre & Post Treatment	329 m^3/day	USA	2007

Process Water Treatment/ OLS ENERGY – CHINO/ USA/ Pure Aqua Inc, USA	RO+ Pre & Post Treatment	568 m^3/day	USA	2007
Boiler Feed Water Treatment/ Hawaiian Electric Company, Inc./USA/ Pure Aqua Inc, USA	RO+EDI+ Pre & Post Treatment	327 m^3/day	USA	2007
Process Water Treatment/ Salam Enterprises LLC/ UAE Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	235 m^3/day	UAE	2007
Reverse Osmosis Desalination Plant at Borcelik-Bursa/ Turkey/ USSU/Turkey	BWRO	2,500 m^3/day	Turkey	2008
Sea Water Desalination Plant/ Club Blue Dreams-Bodrum/ Turkey/ USSU/Turkey	SWRO	350 m^3/day	Turkey	2008
Compact Surface Water (River)Treatment System/Sakalli Co-Kerkuk/Iraq/ USSU/Turkey	Clarification/ Sand Filtration	4,800 m^3/day	Iraq	2008
Arsenic Removal Plant/ Isuzu/Izmir/Turkey/ USSU/Turkey	Arsenic Filter	330 m^3/day	Turkey	2008
Wastewater Re-use Salam Enterprises LLC/ UAE Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	6,000 m^3/day	UAE	2008
Process Water Treatment/ Pakistan Gov't/ Pakistan/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	2,271 m^3/day	Pakistan	2008
Process Water Treatment/ Salam Enterprises LLC/ UAE/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	189 m^3/day	UAE	2008
Process Water Treatment/ al Fada Trading & Contracting/ UAE/ Pure Aqua Inc, USA	Water Filtration System	1,893 m^3/day	Kuwait	2008

Reverse Osmosis Desalination Plant at Alindu Su-Aydin/ Turkey/ USSU/Turkey	BWRO	350 m^3/day	Turkey	2009
Reverse Osmosis Desalination Plant at Akyarlar Sitesi-Bodrum/ (Spring) / Turkey/ USSU/Turkey	BWRO	100 m^3/day	Turkey	2009
Containerized Reverse Osmosis Desalination Plant at Mahmood Hazhar-Al Kut/Iraq/ USSU/Turkey	BWRO	300 m3/day	Iraq	2009
Containerized Reverse Osmosis Desalination Plant/ Samawa PbE Co/Iraq / USSU/Turkey	BWRO	600 m^3/day	Iraq	2009
Oman Ministry of Defense/Oman/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	492 m^3/day	Oman	2009
Process Water Treatment/Egyptian Starch & Glucose Company/ Egypt/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	1,211 m^3/day	Egypt	2009
Process Water Treatment/ Qatar Agent/Qatar Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	1,041 m^3/day	Qatar	2009
Water Bottling Plant Coca Cola/USA/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	2,400 m^3/day	Egypt	2009
Process Water Treatment/ Canadian Nexen Petroleum/ Yemen/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	273 m^3/day	Yemen	2009
Process Water Treatment/ Al Fada Trading & Contracting/ UAE/ Pure Aqua Inc, USA	Water Filtration System	3,510 m^3/day	Kuwait	2009

Sea Water Desalination Plant/Basra/ Iraq/ USSU/Turkey	SWRO	300 m^3/day	Iraq	2010
Sea Water Desalination Plant/ – Basra / Iraq / USSU/Turkey	SWRO	2x400 m^3/day	Iraq	2010
Compact River Water Treatment System at PBE Co/Samawa City/Iraq/ USSU/Turkey	Clarification/ Sand Filtration	4800 m^3/day	Iraq	2010
Process Water Treatment/ETA/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	3,000 m^3/day	Egypt	2010
Process Water Treatment PT Aozora/MEDCO+EDCO/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	210 m^3/day	Indonesia	2010
Potable Water Treatment Oman Ministry of Defense/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	477 m^3/day	Oman	2010
Process Water Treatment/ Colgate / Palmolive/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	708 m^3/day	Mexico	2010
Potable Water Treatment/ Ministry of Municipality/ Pure Aqua Inc, USA	UF System	23,400 m^3/day	Iraq	2010
Irrigation Water Treatment/ Azerbaijan Agent/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	400 m^3/day	Azerbaijan	2010
Process Water Treatment/ al Fada Trading & Contracting/ Pure Aqua Inc, USA	Filtration System	2,044 m^3/day	Kuwait	2010
Reverse Osmosis Desalination Plant/ Yalçınpınar-Kemerburgaz/ (Spring) / Turkey/ USSU/Turkey	BWRO	450 m^3/day	Turkey	2011

Containerized Reverse Osmosis Desalination Plant/ Mahmood Hazhar-Suleymaniya/Iraq / USSU/Turkey	BWRO	300 m3/day	Iraq	2011
Containerized Reverse Osmosis Desalination Plant at Mahmood Hazhar-Erbil/Iraq / USSU/Turkey	BWRO	300 m3/day	Iraq	2011
Process Water Treatment/ al Fada Trading & Contracting/Kuwait/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	1,525 m^3/day	Kuwait	2011
Process Water Treatment/ Ministry of Oil/Iraq/ Pure Aqua Inc, USA	RO+ Pre & Post Treatment	2,670 m^3/day	Iraq	2011
Potable Water Treatment/ Hess Equatorial Guinea, Inc./ Pure Aqua Inc, USA	RO+ Pre & Post Treatment	227 m^3/day	South Africa	2011
Containerized Reverse Osmosis Desalination Plant/ Baghdad/ Iraq/ USSU/Turkey	BWRO	440 m3/day	Iraq	2012
Containerized Reverse Osmosis Desalination Plant/ Ad Diwanyah/Iraq / USSU/Turkey	BWRO	600 m3/day	Iraq	2012
Potable Water Treatment, Ecopreneur Peru/Peru/ Pure Aqua Inc, USA	RO Skid Mounted	30 m^3/day	Peru	2012
Potable (drinking) Water/ One & Only Reethi Rah/ Maldives/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	515 m^3/day	Maldives	2012
Process Water Treatment/ WETCO/Egypt/ Pure Aqua Inc, USA	BWRO	3,000 m^3/day	Egypt	2012
Nitrate & Selenium Removal Plant/ Canadian Mine/Canada/ Pure Aqua Inc, USA	RO Skid Mounted	4,029 m^3/day	Canada	2012

Sea Water Desalination Plant/Basra/ Iraq/ USSU/Turkey	SWRO	300 m^3/day	Iraq	2010
Sea Water Desalination Plant/ – Basra / Iraq / USSU/Turkey	SWRO	2x400 m^3/day	Iraq	2010
Compact River Water Treatment System at PBE Co/Samawa City/Iraq/ USSU/Turkey	Clarification/ Sand Filtration	4800 m^3/day	Iraq	2010
Process Water Treatment/ETA/ Pure Aqua Inc, USA	BWRO+ Pre & Post Treatment	3,000 m^3/day	Egypt	2010
Process Water Treatment PT Aozora/MEDCO+EDCO/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	210 m^3/day	Indonesia	2010
Potable Water Treatment Oman Ministry of Defense/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	477 m^3/day	Oman	2010
Process Water Treatment/ Colgate / Palmolive/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	708 m^3/day	Mexico	2010
Potable Water Treatment/ Ministry of Municipality/ Pure Aqua Inc, USA	UF System	23,400 m^3/day	Iraq	2010
Irrigation Water Treatment/ Azerbaijan Agent/ Pure Aqua Inc, USA	SWRO+ Pre & Post Treatment	400 m^3/day	Azerbaijan	2010
Process Water Treatment/ al Fada Trading & Contracting/ Pure Aqua Inc, USA	Filtration System	2,044 m^3/day	Kuwait	2010
Reverse Osmosis Desalination Plant/ Yalçınpınar-Kemerburgaz/ (Spring) / Turkey/ USSU/Turkey	BWRO	450 m^3/day	Turkey	2011

Containerized Reverse Osmosis Desalination Plant/ Smoo Al Nobles-Baghdad/Iraq / USSU	BWRO	300 m3/day	Iraq	2013
Cl_2 Wet Scrubber at Smoo Al Nobles-Necef/Iraq/ USSU/Turkey/	Wet Scrubber	8,000 m^3/day	Iraq	2013
Cl_2 Gas Chlorination at Smoo Al Nobles-Necef/Iraq/ USSU/Turkey	Cl_2 Gas Chlorination	10 kg/h	Iraq	2013
RO+EDR-Boiler Feed Water / Tradequip/ Venezuela/ Pure Aqua Inc, USA	RO + EDI System	2 x 392 m^3/day	Venezuela	2013
Process Water Treatment/EXXON MOBIL/USA Pure Aqua Inc,USA	Activated Carbon Filters	2 x 818 m^3/day	USA	2013
Boiler feed water RO- Power Plant/USA/ Pure Aqua Inc, USA	RO	2 x 3,270 m^3/day	USA	2013
Wastewater Multimedia Filtration/Site Remediation/USA/ Pure Aqua Inc, USA	Skid Mounted Wastewater Multimedia Filtration	3,145 m^3/day	USA	2013
Process Water Treatment-SDI/Iraq Pure Aqua Inc, USA	RO+EDI	2 x 240 m^3/day	Iraq	2013
Wastewater Re-use Treatment-Intul/ Mexico/ Pure Aqua Inc, USA	RO Skid Mounted	1,363 m^3/day	Mexico	2013
Cooling Water Filtration, ALIS, Iraq/ Pure Aqua Inc, USA	*Multimedia Filtration*	14,400 m^3/day	Iraq	2013

EIA
Environmental Impact Assessment

EIA-Environmental Impact Assessment
A.A.Nabi Lead Smilter/Egypt 1998

إيبكو للهندسه
إستشاريون ومديرو مشروعات بيئيه

التقييم البيئي
لمصنع صهر وتكرير وتصنيع الرصاص

المالك/ الحاج سيد عوض الله عبد النبي
الموقع المقترح/ طريق بلبيس-القاهره الصحراوي

دراسه الناتج المخرجات الصلبه والسائله والغازيه للعمليات الصناعيه
وتاثيراتها المحتمله على البيئه ومدي توافقها مع متطلبات القانون ٤ لسنه ١٩٩٤ بجمهوريه مصر العربيه
ومقترحات وخطط التأهيل لتحقيق التوافق المطلوب.

إيبكو
١٠ ش الطيران-سيدان رابعه العدويه-
مدينه نصر-القاهره
تليفون: ٢٤٨٨٠٢٤٠-٠٢ فاكس: ٦٦٢٦٠٢٤٠١٠٢
e.mail:info@epeco.com www.epeco.com

EIA-Environmental Impact Assessment
Horia 2000 Choclate Co,/Egypt 1999

إبيكوجولف

شركه إبيكوجالف المحدوده للمناطق الحره

ص.ب ٦٦٩٣ رأس الخيمه-الإمارات العربيه المتحده
تليفون: ٢٧٦٩ ٨١٠ ٥٥ ٩٧١+ ٣٨١٦ ٢٣٦ ٧ ٩٧١+ فاكس: ٣٨١٧ ٢٣٦ ٧ ٩٧١+
e.mail:magdi@epecogulf.com www.epecogulf.com

التاريخ: الثالث من فبراير ٢٠١٢

الي من يهمه الأمر

تشهد شركه إبيكو جالف المحدوده للمناطق الحره والمسجله بالإمارات العربيه المتحده ومقرها الرئيسي إماره رأس الخيمه تشهد بإتمام مراجعه وتقييم أداء محطه معالجه مياه الصرف الصناعي والمقامه بمصنع شركه الحريه ٢٠٠٠ للشيكولاته والحلويات بالعاشر من رمضان بجمهوريه مصر العربيه حيث تأكد لنا عند المراجعه بتاريخ هذه الشهاده أن المحطه المذكوره تعمل بشكل جيد حيث تتوافق مخرجاتها مع متطلبات واشتراطات القانون المصري رقم ٦٢/٩٣ والمعدل بالقانون رقم ٢٠٠٠/٤٤ بآخر اصداراته من التعليمات التنفيذيه المرتبطه-فيما يختص بالصرف الي الشبكات العامه. وتخصيصا فقد وجدنا ان معدلات تركيزات الملوثات بالمياه المنصرفه-الإحتياج البيوكيماوي للأكسيجين BOD_5 أقل من ٦٠٠ ملجم/لتر و الإحتياج الكيماوي للأكسيجين COD أقل من ١١٠٠ ملجم/لتر وتركيز الزيوت والشحوم أقل من ١٠٠ ملجم/لتر وتركيز الشوائب المعلقه الكليه أقل من ٨٠٠ ملجم/لتر ومعامل الحموضه والقلويه pH ٦-٩,٥ وذلك طبقا للتفاصيل الوارده بفصل التجارب الميدانيه والإختبارات المعمليه بدراسه تقييم الأثر البيئي للمصنع المذكور والتي قمنا بإعدادها في حينه.
كما وقمنا بمراجعه وتقييم سجلات المراقبه البيئيه والتي تشمل المعلومات البيئيه التفصيليه والتي قمنا بتصميمها ضمن متطلبات التأهيل البيئي للمصنع طبقا للقانون رقم ١٩٩٤/٤ وقراراته التنفيذيه وحيث يقوم المتخصصون بالمصنع بإدارتها وتحديثها وحفظها بمكان محدد لإطلاع مفتشي أجهزه الحمايه والرقابه البيئيه-حيث وجدت السجلات حديثه وتحوي البيانات المطلوبه وبالتوقيتات المحدده.

هذا وستقوم شركه إبيكو جالف المحدوده للمناطق الحره ومن خلال شركائها بمصر الساده شركه إبيكو-هندسه ومشروعات البيئه المحدوده ومقرها مدينه القاهره ستقوم بتقديم الدعم والمساندة الفنيه للساده مصنع شركه الحريه ٢٠٠٠ للشيكولاته والحلويات بالعاشر من رمضان بجمهوريه مصر العربيه لتأكيد النزامهم بالتوافق مع متطلبات واشتراطات القانون المصري رقم ٦٢/٩٣ والمعدل بالقانون رقم ٢٠٠٠/٤٤ بآخر اصداراته من التعليمات التنفيذيه المرتبطه-فيما يختص بالصرف الي الشبكات العامه.

وعليه فقد تم إصدار هذه الشهاده.....

مجدي البحيري
المدير التنفيذي

هاتف جوال- ٨١٠٢٧٦٩ ٥٥ ٩٧١+ الإمارات العربيه المتحده
١٣٠٤١٠٨ ٥٤ ٩٦٦+ المملكه العربيه السعوديه
٢٢١٠٤١٥٠ ١٢ ٢٠+ مصر

EIA-Environmental Impact Assessment
SEVERO Used Oil Refinsry/Egypt 2014

مصنع معالجه وتدوير
النفايات الصناعيه السائله والصلبه
الغير خطره أو قليله الخطوره
ضمن منظومه الجمع والتخلص الآمن
وإعاده تدوير النفايات الصناعيه

تقييم ودراسه تفصيليه للأثر البيئي المحتمل

المصنع القائم بمنطقه أم زغيو بالإسكندريه-جمهوريه مصر العربيه
والجاري إعاده تأهيله لتغيير النشاط

المالك/ سيفيركو للتجاره والخدمات البيئيه

دراسه النواتج والمخرجات الصلبه والسائله والغازيه الناشئه عن التشغيل وتأثيراتها المحتمله علي البيئه ومدي توافقها مع متطلبات القانون 4 لسنه 1994 والقانون 9 لسنه 2009 واللوائح التنفيذيه بجمهوريه مصر العربيه ومقترحات وخطط الرصد البيئي.

التاريخ: 10 يناير 2015

ايكو. يو إس إيه

١١ ش الطيران جنوب رابعه العدويه-مدينه نصر ١١٣٧١-القاهره-جمهوريه مصر العربيه
تليفون: ٢٠٢٢٤٠١٢٤٨٨ / ٢٠١٢٢٢١٠٤١٥٠
email:info@epecousa.com www.epecousa.com

EIA-Environmental Impact Assessment
Manar Oil Refinsry/Egypt 2014

مشروع مصنع شركه المنار
للمواد البترولیه والكيماويه
شركه مساهمه مصريه
الموقع / تقاطع طريق بلبيس- القاهره الصحراوي/منطقه المناطق الصناعيه
قريه غيته-مركز بلبيس-محافظه الشرقيه

دراسه توقع المخرجات الصلبه والسائله والغازيه للعمليات الصناعيه
وتاثيراتها المحتمله علي البيئه
والظروف البيئيه للعمل وتاثيراتها الصحيه علي العاملين
ومدي توافقها مع متطلبات القانون ٤ لسنه ١٩٩٤ بجمهوريه مصر العربيه
ومقترحات وخطط لتأهيل لتحقيق التوافق المطلوب.

اعداد:
شركه هندسه ومشروعات البيئه المحدوده (ايكو)

EIA-Environmental Impact Assessment
Ocean Blue North Coast/Egypt 2014

epeco.usa
10, Taiaran Str., Raba'a al Adawia,
Nasr City11371 Cairo, Egypt
ph:+20 2 2401 6626 cell:-20 12 2210 4150
e.mail: info@epecousa.com www.epecousa.com

فندق أوشن بلو
ق 22 مركز مارينا العلمين –الساحل الشمالي

دراسه نواتج المخرجات الصلبه والسائله والغازيه للعمليات الصناعيه
وتأثيراتها الفعليه علي البيئه
والظروف البيئيه للعمل وتأثيراتها الصحيه علي العاملين
ومدي توافقها مع متطلبات القانون 4 لسنه 1994 بجمهوريه مصر العربيه
وتعديلاته ولوائحه التنفيذيه
ومقترحات وخطط التأهيل لتحقيق التوافق المطلوب.

إبيكو
شركه هندسه ومشروعات البيئه المحدوده

تقرير تقييم الأثر البيئي
لتشغيل منتجع ماريتيم الجولف
ام مرنجه-شرم الشيخ

وتأثره علي بيئه العمل

epeco

ديسمبر ٢٠١٥

Environmental Impact Assessment

Ciba Geigy Pesticide Stores, Riyadh, Saudi Arabia, 1994.

Aramco Wastewater Treatment Plant, Dhahran,Saudi Arabia, 1994.

Al Ahram Steel & Iron, Egypt 1998.

AAN Lead Smelter, Egypt 1998.

Manar Petrochemical Factory, Egypt 1999.

Ahlia Oils, Egypt, 1999.

Horia 2000 Sweet & Confect. Factory, Egypt 1999.

Elshark Metals, Egypt, 2000.

Gantec Residential Compex, Egypt, 2000.

Police Officers Resort, Marsa Matrouh, Egypt, 2000.

Petroland LPNG, Egypt, 2002.

Abu Eriki Resort, Marsa alam, Egypt, 2003.

Royal Paradize Resort, sharm el Sheikh, egypt, 2003.

Sharm el Sheikh Airport Logistics Center, Egypt 2004.

Abu Eriki Resort, Marsa alam, Egypt, 2003.

Golden Shrimps Farm, Ras Ghaleb, egypt 2005.

Areej Resort, Egypt, 2006.

Muwailah Lagoon Clean-up & Recycling, Sharjah, UAE 2007.

RAKIA phase II Industrial Wastewater Collection, Transfer and Treatment, UAE, 2007.

Banyan Tree Resort, UAE, 2008.

al Rowbaiki Tanneries, Egypt, 2010.

Sokhna Port Wastewater Treatment & Reuse, Egypt 2011.

Chevron Wastewater Treatment & Reuse, Egypt 2013.

gallery

Signing a joint Business Cooperation Protocol between EPECO & Arabian Organization for Industrialization AOI-Cairo/Egypt-February 7th, 2017

Genral Mmahmoud Zaghloul, General Manager/Arabian Organization for Industrialization AOI+Magdi el Beheiri, CEO/EPECO upon signing a joint business cooperation protocol on February 7th, 2017

Signing a manufacturing contract with Kader Factory for Advanced Industries/Arabian Organization for Industrialization for for EPECO's Hazardous & Medical Wastes Incineration Plants EP.MEDI-Cairo/ Egypt-September 26th, 2017.

Right to lift-Mr. Abdel Sadek abdel Reheem(eng), Chairman/Kader Factory for Advanced Industrues/Arabian Organization for Industrialization AOI+Magdi el Beheiri, CEO/EPECO upon signing a manufacturing contract for EPECO's Hazardous & Medical Wastes Incineration Plants EP.MEDI-Cairo/ Egypt September 26th, 2017.

Signing a manufacturing contract with Kader Factory for Advanced Industries/Arabian Organization for Industrialization AOI for EPECO's Wastewater Treatment & Recycling Plants EP.MBR-Cairo/ Egypt-May 8th, 2018.

Right to lift-Magdi el Beheiri, CEO/EPECO+Mr. Magdi Salah co-Chairman/Kader Factory for Advanced Industries/Arabian Organization for Industrialization AOI+Gen Mahmoud Zaghloul/Director Gesnral AOI, upon signing a manufacturing contract for EPECO's Wastewater Treatment & Recycling Plants EP.MBR-Cairo/ Egypt
May 8th, 2018.

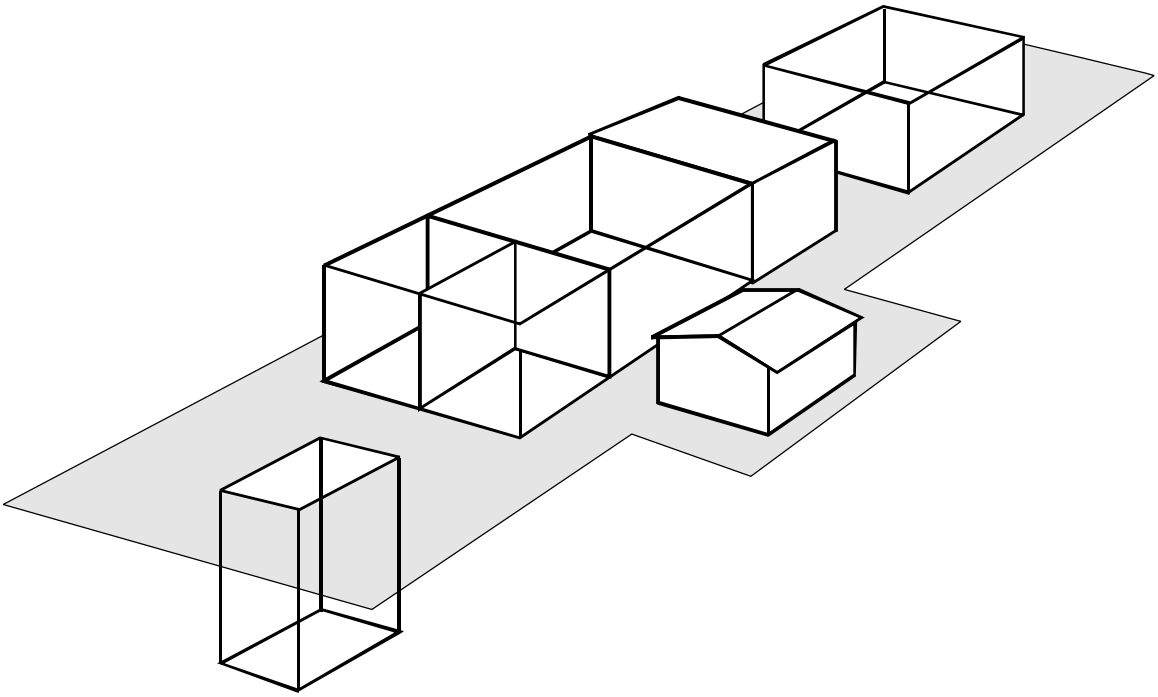
Signing a memorandum of understanding between Egypt and Germany for Rain Enhancenebt /Technolgy Transfer Cairo/Egypt-April 6th, 2016

Front right to lift: Magdi el Beheiri, CEO/EPECO+Dr. Helmut Fuhrer,CEO/Weather Tec/Munchen/Germany+Mr. Matt Sawaged, Vice President, Middle East & North Africa/Weather Tec/Munchen/Germany. Back left to right: HE Mr. Siegmar Gabriel, Vice Consular/Germany+HE Mrs. Dalia Khorshed, Minister of Investment/Egypt+HE Dr. Mohammed Shaker/ Minister of Electricity/Egypt+HE (Eng) Tarek Kabeel, Minster of Industry/Egypt+ HE Dr. Sahar Nasr,Minister of International Cooperation/Egypt, upon signing a memorandum of understanding between Egypt and Germany for Rain Enhancement Technology Transfer, April 16th, 2016.

Supervision of Construction of 200 cu m/day EP.MBR Wastewater Treatment & Reuse Plant/Suez/Egypt -2013

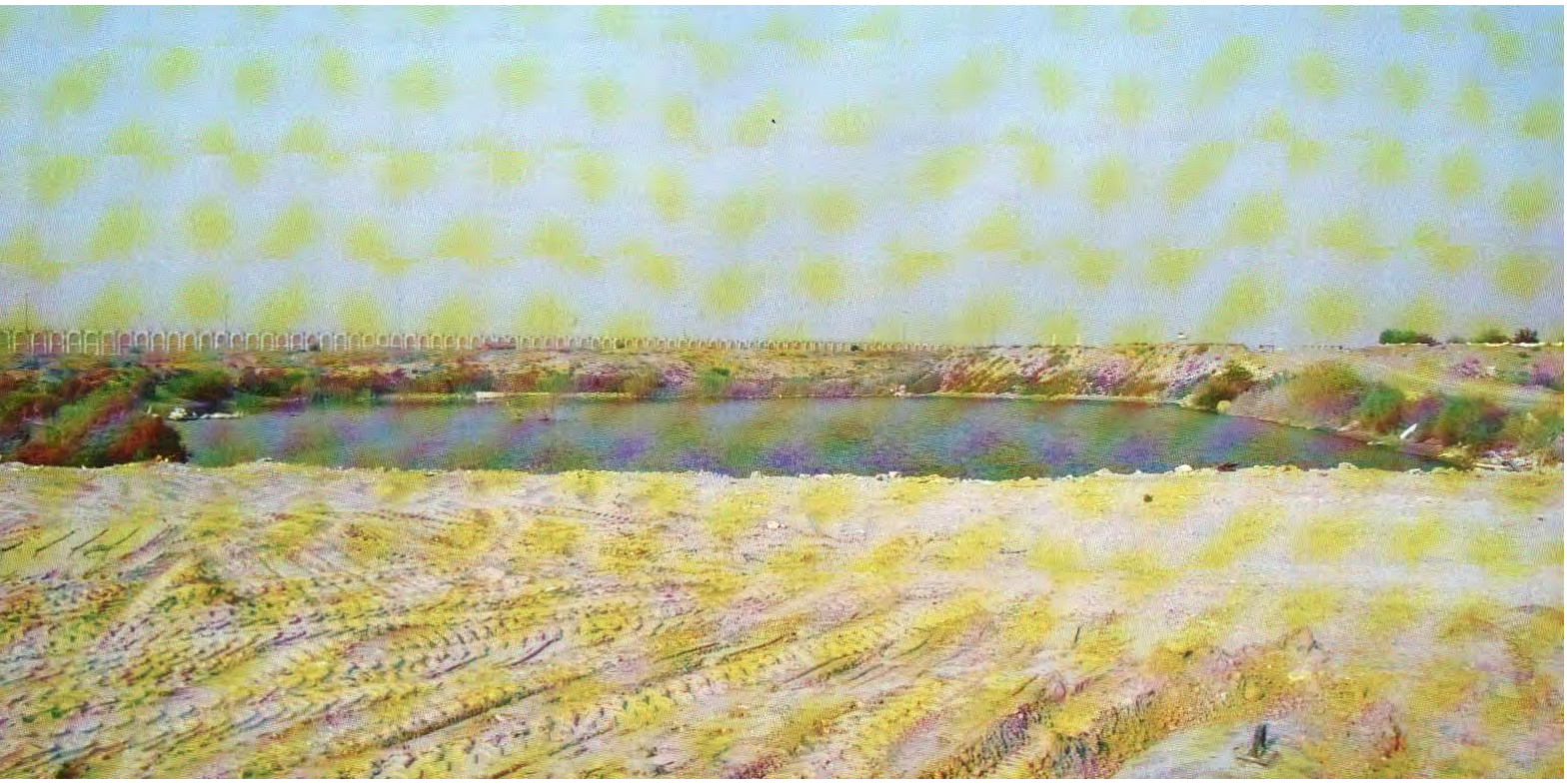
Supervision of Construction of 400 cu m/day EP.MBR Wastewater Treatment & Reuse Plant/Sokhna/Egypt -2012

Supervision of Construction of 400 cu m/day EP.MBR Wastewater Treatment & Reuse Plant/BanYan Tree-RAK-UAE -2010



Supervision of Construction of 1200 cu m/day EP.MBR Wastewater Treatment & Reuse Plant/RAKIA Ind. Zone-RAK-UAE -2009

Design/Build of 3000 cu m/day Industrial Wastewater Treatment & Reuse Plant/Sharjah Lagoon-UAE -2009



Aircraft..... the Passion

50 years of
building
RC aircrafts
.... 1970-2020

annexes

بسم الله الرحمن الرحيم

جمهورية مصر العربية

غرفة الصناعات الهندسية

شهادة عضوية

تشهد غرفة الصناعات الهندسية بأن المنشأة الصناعية

شركة هندسة ومشروعات البيئة المحدودة - ابيكو

التي عنوانها **١٠ ش الطيران رابعة العدوية مدينة نصر القاهرة**

مسجلة بعضوية الغرفة برقم (٩٣٨) هندسية

وقد حررت هذه الشهادة تطبيقاً للقرار الوزاري رقم ٤٣٧ لسنة ١٩٩٢ ووفقاً لطلب المنشأة المذكورة.

صدرت في ٦/١٦ /٢٠٠٢

تنتهي في ١٥/ ٦ /٢٠٠٣

المدير العام

د.

CHAMBER OF ENGINEERING INDUSTRIES
غرفة الصناعات الهندسية

رقم ٠٢٨٢

بسم الله الرحمن الرحيم

جمهورية مصر العربية
وزارة الصناعة والثروة المعدنية

شهادة

تشهد الوزارة بأن المنشأة الصناعية

شركة هندسة ومشروعات البيئة المحدودة (ايبكو) / قطاع خاص / ذات مسئولية محدودة

اسم صاحب المنشأة : شركة ذات مسئولية محدودة

المقر الرئيسى : ٢٩٥ ش بورسعيد / السيدة زينب / القاهرة

مقر المصنع : أجا / شارع العلوية بالكتلة الجديدة / الدقهلية

قيدت بالسجل الصناعى برقم (٢٢٠٣٥)

سنة الإصدار : ١٩٩٧

نوعية الصناعة : هندسية

المنتجات الرئيسية : تجميع جهاز تعقيم وتنقية المياه بالاشعة فوق البنفسجية و تجميع مرشح مياه بالشروط خلف الشهاده

وقد حررت هذه الشهادة تطبيقا لقانون السجل الصناعى رقم ٢٤ لسنة ١٩٧٧ ووفقا للبيانات المقدمة من المنشأة المذكورة

نائب رئيس
الهيئة العامة للتصنيع

تحريرًا فى ٢٧ / ١٠ / ١٩٩٧

تنتهى فى ٢٣ / ٩ / ٢٠٠٢

(النشرة رقم ٣٣٥ شهر يوليه سنة ١٩٩٢)

وزارة الاقتصاد والتجارة الخارجية

مصلحة الشركات

صحيفة الشركات

القاهرة
الهيئة العامة لشئون المطابع الأميرية
١٩٩٢

وزارة الاقتصاد والتجارة الخارجية

مصلحة الشركات

قررت اللجنة المختصة بفحص طلبات تأسيس الشركات المشكلة طبقا لنص المادة ١٨ من القانون رقم ١٥٩ لسنة ١٩٨١ بإصدار قانون شركات المساهمة وشركات التوصية بالأسهم والشركات ذات المسئولية المحدودة بجلستها المنعقدة فى ١٩٩٢/٤/١

الموافقة على تأسيس شركة : هندسة ومشروعات البيئة المحدودة (أبيكو).

نوع الشركة : ذات مسئولية محدودة .

تم التصديق على توقيعات مؤسسى الشركة بمكتب : توثيق الجيزة النموذجى .

بمحضر تصديق رقم ١٤٠٥ (أ) لسنة ١٩٩٢ بتاريخ ١٩٩٢/٤/٢٣

تم القيد فى السجل التجارى بمكتب : جنوب القاهرة .

رقم وتاريخ القيد فى السجل التجارى ١٨٨٤٠ بتاريخ ١٩٩٢/٥/٢٠

وبناء عليه تقرر نشر عقد هذه الشركة كما هو مبين فيما يلى بهذه الصحيفة .

وزارة التموين والتجارة الداخلية

مصلحة التسجيل التجارى

(استمارة رقم ٣ « سجل »)

شركات أموال — المركز العام

١٧٦١

سجل تجارى رقم ١٨٨٤ بتاريخ ٢٠ / ٥ / ١٩٨٩

صادر من مكتب سجل تجارى جنوب محافظة القاهرة

١ — نوع الشركة مسئولية محدودة

٢ — عنوان الشركة أو اسمها التجارى هندسة ومشروعات البيئة المحدودة (ابكو)

٣ — السمة التجارية (إن وجدت)

٤ — الغرض من تأسيس الشركة ① القيام بأعمال المقاولات العامة والتجارة العامة والتصنيع والاستشارات الهندسية والخدمات الصناعية ② القيام بأعمال هندسة ومشروعات البيئة وحمايتها وكافة الأعمال المرتبطة بمشروعات حماية البيئة من التلوث والخدمات الصناعية لها كما تشمل كافة الأنشطة التجارية والهندسية والصناعية المرتبطة بها مثل تحلية ومعالجة المياه لأغراض الشرب من مصادرها الجوفية والسطحية ومعالجة مياه الاستخدامات *

٥ — عنوان المركز العام للشركة ٩٥ شارع [illegible]

٦ — عناوين الفروع والوكالات التابعة للشركة (سواء داخل الجمهورية أو خارجها) :

٧ — رأس مال الشركة المرخص به ٥٠٠٠٠ جنيه (خمسون ألف جنيه مصرى) موزع على ٥٠٠ حصة قيمة كل حصة ١٠٠ جنيه .

(أ) مقدار رأس مال الشركة المصدر

(ب) المبالغ المؤداة منه مدفوع بالكامل

(ج) المبالغ التى تعهد الشركاء بأدائها

(د) قيمة الحصص العينية (إن وجدت)

(ﻫ) قيمة حصص الأجانب

٨ — رصيد الفروع أو الوكالة المدينة للمركز العام (إذا كان المركز العام فى الخارج)

٩ — مدة الشركة خمس وعشرون عاما تبدأ من تاريخ قيدها بالسجل التجارى / ١٩٨ وتنتهى فى / / ١٩٨

١٠ — تاريخ الترخيص بمزاولة التجارة أو موافقة الهيئة العامة للاستثمار

١١ — رقم تسجيل العلامات التجارية وبراءات الاختراع والرسوم والنماذج الصناعية

١٢ — مدير الفرع الرئيسى أو الوكالة العامة بالجمهورية (إذا كان المركز العام فى الخارج) :

الإسم واللقب

تاريخ ومحل ميلاده / / ١٩ جنسية

* الصناعية ومعالجة وإعادة استخدام مياه الصرف الصحى ومعالجة مياه الصرف الصناعى ومعالجة النفايات الصناعية ومعالجة النفايات الصلبة ومراقبة ومعالجة التلوث البحرى ومراقبة ومعالجة تلوث مصادر المياه الجوفية والسطحية ومراقبة ومعالجة تلوث الهواء الجوى . ③ القيام بأعمال الوكالات التجارية والاتفاق مع الوكالات المماثلة ④ التمثيل التجارى مع الشركات المصرية المتخصصة ⑤ القيام بأعمال التسويق للخدمات والمشروعات بما فى ذلك إدارة الأنشطة للدعاية والإعلان وبحوث التسويق والدراسات والعقود ⑥ القيام بتنفيذ والإشراف على المشروعات المتكاملة وتطويرها بما فى ذلك أعمال التصميم والهندسة والتصنيع والتوريد والتركيب والتشغيل والاختبار والصيانة ⑦ القيام بالإشراف على برامج البحوث والتطوير فى المجالات المرتبطة بمجال الأعمال .

١٣ — أعضاء مجلس الإدارة فى الشركات المساهمة ووكلاؤهم المديرين وصفة كل منهم ومدى سلطاتهم فى الإدارة والتوقيع :

الإسم واللقب	الصفة	تاريخ الميلاد	محل الميلاد	الجنسية
مهندس/ مجدى محمد عمر العمرى	مدير الشركة	٦/١٠/١٩٥٤	السيدة زينب	مصرى

يمثل المدير الشركة فى علاقاتها مع الغير وله فى هذا الصدد أوسع السلطات التعامل باسمها وإجراء كافة العقود والمعاملات الداخلة ضمن غرض الشركة وعلى الأخص تعيين وعزل كافة الوكلاء والمستخدمين بالشركة وتحديد مرتباتهم وأجورهم ومكافآتهم [illegible] وله حق البيع والشراء [illegible] المستندات التجارية وإبرام جميع العقود والارتباطات والصفقات التى تتعلق بأعمال الشركة بالنقد أو بالأجل وله شراء وبيع جميع المواد والمنتجات والبضائع والمنقولات والاقتراض [illegible] الاعتمادات وغير ذلك مما تقتضيه أغراض ومصالح وأهداف ونشاط الشركة وذلك فيما عدا ما استثنى بنص خاص فى القانون أو اللائحة التنفيذية أو عقد الشركة من أعمال أو تصرفات تدخل فى اختصاص الجمعية العامة [illegible] [illegible] والمشتريات والمقاولات وبيع [illegible] والرهون [illegible] فلا يكون [illegible] إلا بموافقة الجمعية العامة [illegible] الحائزة لثلاثة أرباع رأس المال ولا تكون الشركة ملزمة إلا إذا وقعه المدير أو [illegible] مصحوبا بالصفة التى يتعامل بها

الهيئة العامة لشئون المطابع الأميرية (أمين القاهرة) ٦٢١٨ س ١٩٨٦ — ٥٠٠٠٠

تحريرا فى / ٥ / ١٩٨٢

أمين مكتب التسجيل التجارى

CERTIFICATE

State of Nevada Secretary of State

I, CHERYL A. LAU, Secretary of State of the State of Nevada, do hereby certify that

EPECO U.S.A., INC.

did on the TWENTY-SEVENTH day of APRIL, 19 93, file in this office the original Articles of Incorporation; that said Articles are now on file and of record in the office of the Secretary of State of the State of Nevada, and further, that said Articles contain all the provisions required by the law of said State of Nevada.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of State, at my office in Carson City, Nevada, this

TWENTY-SEVENTH day of APRIL, A.D. 19 93

Secretary of State

By Deborah J. Jennings
Deputy

Government of Ras Al Khaimah
RAK Investment Authority
Free Zone

حكـــومة رأس الخيـمـة
هيئة رأس الخيمة للاستثمار
المنطقة الحرة

رخـصـة
LICENCE

LICENCE NO.	RAKIA 29 FZ1 03 07 0293		رقم الرخصة
LICENCE TYPE	INDUSTRIAL	صناعية	نوع الرخصة
LICENSEE	EPECO Gulf FZ LLC	أيكو جلف ش.م.ح–ذ.م.م	المرخص
PARTNERS NAME	Magdi Mohamed Omar Elbeheiri	مجدي محمد عمر البحيري	أصحاب الترخيص
	Ismat Al Sawaqed	عصمت سواقيد	
	Dr.Khater Massaad	د.خاطر مسعد	
TRADE NAME	EPECO Gulf FZ LLC	أيكو جلف ش.م.ح–ذ.م.م	الإسم التجاري
ADDRESS	P.O.Box: 31291 Al- Jazeera Al-Hamra Ras Al Khaimah	ص.ب : 31291 الجزيرة الحمراء رأس الخيمة	العنـــوان
ACTIVITY	Crane manufacturing, Specialized Precision Equipment Manufacturing, Water treatment equipment trading, Water Sewage & Irrigation Engineering services	صناعة العنفات –التوربينات,صناعة الاجهزة والمعدات الدقيقة المتخصصة,تجارة المياه وتنقيتها,خدمات هندسة المياه والصرف الصحي	النشـــاط
MANAGER	Ismat Al Sawaqed	عصمت سواقيد	المـدير
Legal Status	Free Zone-Limited Liability Company	شركة منطقة حرة–ذات مسؤولية محدودة	الشكل القانوني
ISSUE DATE	29/03/2007		تـــاريخ الإصدار
RENEWED ON	31/03/2009		تاريخ التجديد
Amended On			تاريخ التعديل :
VALID TILL	28/03/2010		تـــاريخ الإنتهاء

RAK Investment Authority Free Zone
هيئة رأس الخيمة للاستثمار المنطقة الحرة
P.O. Box 31291

Chief Executive Officer

P.O. Box. 31291, Ras Al Khaimah, United Arab Emirates
Tel.: +971 7 2446533, Fax : +971 7 2447202, Website : www.rakinvestmentauthority.com
administration@rakinvestmentauthority.com

Government of Ras Al Khaimah
RAK Investment Authority Free Zone

حكومة رأس الخيمة
هيئة رأس الخيمة للاستثمار (منطقة حرة)

شهادة تأسيس
CERTIFICATE OF INCORPORATION

RAK Investment Authority hereby certifies that implementing regulations regarding the formation of a Free Zone – Limited Liability Company and all legal requirements concerning the incorporation have been satisfied and

تشهد هيئة رأس الخيمة للاستثمار برأس الخيمة بأن كافة الاجراءات و متطلبات قـــــانون تأسيس شركة منطقة حرة – ذات مسؤولية محدودة قد اســـــتوفيت وعليه فأن

EPECO Gulf FZ-LLC

ايبكو جلف ش.م.ح (د.م.م)

is incorporated in the RAK Investment Authority under Registration Number :-

قد تأسست في هيئة رأس الخيمة للاستثمار تحت رقم:

RAKIA 29 FZ1 03 07 0293

RAKIA 29 FZ1 03 07 0293

as a Free Zone – Limited Liability Company On this ot 29/03/2007

شركة منطقة حرة – ذات مسؤولية محدودة في هذا اليوم الموافق

2007/03/29

The said Company is incorporated under our seal, at **RAK Investment Authority**, Ras Al Khaimah, and United Arab Emirates.

الشركة المذكورة تأسست بموقتنا و تحت ختمنا هيئة رأس الخيمة للاستثمار ، الامارات العربية المتحدة.

Chief Executive Officer
RAK Investment Authority

الرئيـــــــــس التنفيذي
هيئة رأس الخيمة للاستثمار .

Registration No 0293 رقم التسجيل:

صالحة لهيئة رأس الخيمة للاستثمار (منطقة حرة) برأس الخيمة فقط وتخضع لشروط عقد الإيجار وقوانين وأنظمة ولوائح المنطقة الحرة لهيئة رأس الخيمة للاستثمار

Valid for RAK Investment Authority (Free Zone), Government of Ras Al Khaimah, United Arab Emirates only. Subject to the terms of Lease Agreement, Laws, Regulations and Notices of RAK Investment Authority.

4

بروتوكول تعاون مشترك

بين

الهيئة العربية للتصنيع (AOI)

و

شركة هندسة و مشروعات البيئة المحدوده (إبيكو- EPECO)

فى مجال هندسة وصناعة معدات و منظومات معالجة المياه و الصرف الصحى و النفايات الصلبة

epeco
Water & Wastewater Technology

الهيئة العربية للتصنيع
ARAB ORGANIZATION
FOR INDUSTRIALIZATION

بروتوكول تعاون مشترك

بين الهيئة العربية للتصنيع (AOI)

و شركة هندسة و مشروعات البيئة (إبيكو – EPECO)

في مجال هندسة وصناعة معدات و منظومات معالجة المياه

و الصرف و النفايات الصلبة

عقد إتفاق

بين

الهيئة العربية للتصنيع

مصنع قادر للصناعات المتطوره

و

شركة هندسة و مشروعات المياه (ويبكو)-ش.م.م

بخصوص

صناعه معدات

معالجه النفايات الخطره والطبيه الطراز EP.MEDI

عقد إتفاق

بين

الهيئة العربية للتصنيع

مصنع قادر للصناعات المتطوره

و

شركة هندسة و مشروعات المياه (ويبكو)-ش.م.م

بخصوص

صناعه معدات

معالجه الصرف الصحي وإعاده

الإستخدام طراز EP.MBR

بسم الله الرحمن الرحيم

الهيئة العربية للتصنيع

مصنع الطائرات

عقد اتفاق
التعاون الفنى والتجارى

تمهيد :-

انه فى اليوم الاول من شهر يونيو سنه ١٩٩٣ ميلاديه فقد تم الاتفاق بين كل من :-

١) مصنع الطائرات احد مصانع الهيئه العربيه للتصنيع - هيئه عربيه مسجله طبقا لانظمه الجامعه العربيه ومقره الرئيسى بحلوان - جمهوريه مصر العربيه ويمثله فى التوقيع على هذا العقد المهندس / احمد السيد بصفته رئيسا لمجلس الاداره .
ويشار اليه فيما بعد " الطرف الاول "

٢) شركه هندسه ومشروعات البيئه المحدوده - ابيكو - شركه ذات مسئوليه محدوده مسجله طبقا للقوانين المصريه ومقرها الرئيسى بمدينه القاهره - جمهوريه مصر العربيه ويمثلها فى التوقيع على هذا العقد المهندس / مجدى محمد عمر البحيرى بصفته رئيسا للشركه ويشار اليه فيما بعد " الطرف الثانى "

اتفق الطرفان على التعاون الفنى والتجارى لتصنيع وتسويق معدات معالجه المياه بجمهوريه مصر العربيه والمنطقه العربيه والافريقيه طبقا للتفصيلات التاليه :-

المادة "١" :-

يعتبر التمهيد السابق جزء لا يتجزأ من هذا العقد .

المادة "٢" :- مجال الاعمال :-

تشمل الاعمال موضوع هذا العقد المجالات التاليه :-

* تحليه مياه الشرب من مصادرها الجوفيه او البحريه .
* معالجه مياه الاستخدامات الصناعيه .
* معالجه مياه الصرف الصحى واعاده استخدامها .
* معالجه مياه الصرف الصناعى .

المادة "٣" منطقه العمل :-

يعمل بهذه الاتفاقيه داخل الحدود الجغرافيه لجمهوريه مصر العربيه .

بعده /٢

سهام /

PHONE : CAIRO 782516 / 782580
TELX : 23183 NASER UN
FAX : 782408

تلفونيا : ناصر حلوان
CABLE : NASER HELWAN

تليفون : ٧٨٢٥٨٠ / ٧٨٢٥١٦ القاهرة
تلكس : ٢٣١٨٣ ناصر UN
فاكس : ٧٨٢٤٠٨

بسم الله الرحمن الرحيم

الهيئة العربية للتصنيع
مصنع الطائرات

المادة (١٢) التعديلات :

يجوز ادخال اى تعديلات على مواد هذه الاتفاقيه او ادخال مواد جديده او ملاحق بموجب اتفاق كتابى بين الطرفين •

المادة (١٣) الاخطارات :

تكون كافه الاخطارات المرتبطه بهذه الاتفاقيه كتابه وتسليم باليد او البريد المسجل او اى وسيله تؤكد الاستلام دون إخلال بالتزامات كلا الطرفين قبل الطرف الاخر •

المادة (١٤)

تسرى لوائح الهيئه العربيه للتصنيع فيما لم يرد به نص •

المادة (١٥) مستندات العقد :

تحرر هذا العقد من نسختين اصليتين واحده بيد كل طرف للعمل بموجبها وعليه فقد جرى التوقيع •

الطرف الاول	الطرف الثانى
مصنع الطائرات	شركه هندسه ومشروعات البيئه المصريه
ويمثله	ابيكو ويمثلها
المهندس / احمد السيد	المهندس/ مجدى محمد عمر البحيرى
ـ العنوان . القاهرة - حلوان ..	٢٩٥ شارع بورسعيد السيدة زينب القاهرة
ـ التليفونات ..٧٨٧٥٩٤٠٠٠...	........٢٩١٠٨٦٥
ـ الفاكس ...٧٨٤٢٠٨....	........٢٩١٠٨٦٥
ـ التلكس ....ناصر	....
ـ التوقيع	...... مجدى البحيرى ......

سهام /

بسم الله الرحمن الرحيم

بروتوكـــــول

للتعاون المشترك بين مصنع الطائرات التابع للهيئة العربية للتصنيع وشركـة هندسـة ومشروعـات البيئـة المحـدودة (أبيـكو) في مجـال تصنيـع وتسويـق محطـات تحليـة طـراز ROMARINE

انـه في يـوم الموافـق / /٢٠٠٦ فقد تم الاتفاق بين كل من :-

أولاً : *مصـنع الطائـرات – التابـع للهيئـة العربيـة للتصنيـع* ومقره حلوان – القاهرة ، ويمثله في التوقيـع على هذا البروتوكول السيد المهندس / رضا محمد راشد بصفته مدير القطاع التجاري ٠

(طرف أول)

ثانـياً : شركـة هندسـة ومشروعـات البيئـة المحـدودة (أبيـكو) – ومقرها ١٠ شـارع الطـيران مـيدان رابعة العدويـة – مدينـة نصـر– القاهـرة – مصر ويمـثلها فـي التوقيع على هذا البروتوكول السـيد المهندس / مجدي محمـد عمـر بصفته المديـر المسـئول ٠

(طرف ثاني)

"البند الثامن"

" العناويـــــــــن "

العناويـــن المذكـــورة بصـــدر هـــذا الـــبروتوكول هـــي العناوين التي تتم عليها جميع المكاتبات والمراســـلات بين الطرفين وعلى الطرف الذي يغير مقره أخطار الطرف الآخر بذلك وإلا اعتبرت المكاتبات والمراسلات الموجهة إليه بالعنوان الموضح بالعقد قد تمت صحيحة ومنتجة لآثارها .

"البند التاسع"

" عـــــدد النســـــــخ "

تحرر هذا البروتوكول من عدد (٢) نسخة بيد كل طرف نسخة وذلك للعمل بموجبها .

الطرف الأول

الطرف الثاني

المركز القومي للبحوث

عقد إتفاق بين المركز القومي للبحوث
و شركه هندسه ومشروعات البيئه المحدوده (إبيكو)

أنه في يوم الموافق : / / ٢٠٠٥

حرر هذا العقد بين كل من :

أولاً: المركز القومي للبحوث ويمثله السيد الأستاذ الدكتور / هاني عز الدين الناظر
بصفته رئيس المركز القومي للبحوث
ومقره- ش البحوث (التحرير سابقاً) – الدقي – الجيزة .
(طرف أول)

ثانياً: شركه هندسه ومشروعات البيئه المحدوده (إبيكو) يمثلها قانونا
السيد المهندس/ مجدىمحمد عمر البحيرى
بصفته رئيس مجلس الإدارة.
ومقرها ١٠ شارع الطيران-رابعه العدويه- مدينة نصر- القاهره.
(طرف ثاني)

تمهيد

يعتبر المركز القومي للبحوث أكبر تجمع علمي متعدد التخصصات يقوم بالبحث العلمي والتطوير ليس في جمهورية مصر العربية وحدها أيضا علي مستوي القارة الأفريقية ومنطقة الشرق الأوسط بأسرها في مجالات الزراعة والصناعة والصحة والبيئة ونقل التكنولوچيا والطاقة والعلوم الأساسية وسائر المقومات الرئيسية للأقتصاد القومي في نطاق السياسة العامة للدولة ولتحقيق ذلك يقوم المركز بإجراء الدراسات والبحوث في مجالات العلوم الحديثة والتكنولوچيا المتطورة وتنفيذ الأنشطة التي تهدف إلي ابتكار التكنولوچيات اللازمة لمشروعات الاقتصاد القومي وتدريب الكوادر العلمية في المجالات المتخصصة التي تحتاجها جهود الأرتقاء التكنولوجى للبلاد وتوثيق الروابط العلميه والتعاون مع المؤسسات والهيئات المحليه والدوليه فى جميع الأنشطه.

ورغبة من الطرف الثانى فى الأستفاده من تلك الخبرات فقد تم الأتفاق على:

١. إنشاء محطات تنقية مياه فى مناطق محرومه من مياه الشرب.
٢. تدريب كوادر شابه من نفس أهالى المنطقه على تشغيلها وصيانتها بالمشاركه مع الطرف الأول.

وذلك من خلال الوحده الأستشاريه لبحوث الفيروسات والأختبارات الحيويه بالمركز القومى للبحوث.

رئاسة مجلس الوزراء
جهاز شئون البيئة
محميات البحر الأحمر

السيد المهندس / مدير التفتيش البحرى بالغردقة

تحية طيبة .. وبعد

نحيط سيادتكم علماً بأن محطة المعالجة طراز Marincel STM-12 إنتاج شركة هندسة ومشروعات البيئة المحدودة أبيكو مطابقة لشروط ومعايير قانون البيئة رقم ٤ لسنة ١٩٩٤ للصرف على البيئة البحرية طبقاً لتقرير مركز الدراسات والبحوث كلية الهندسة – جامعة المنصورة وتقرير الإدارة المركزية للمعامل قسم المياة – وزارة الصحة والسكان .

ولا مانع لدى محميات البحر الأحمر من تركيب هذا النوع من المحطات على المنشات وذلك من الناحية البيئية مع مراعاة الاشتراطات الفنية الأخرى .

يعتمـــد

د . محمود حنفى
المشرف العام على محميات البحر الأحمر

HICK HARGREAVES & Co. Ltd.

BOLTON,
ENGLAND. BL3 6DB.

Registered Office

Telephone: +44 (0) 204 23373
Facsimile: +44 (0) 204 395261
Telex: 63239 HICK G

Vat Reg. No. GB 337 4702 55
Registered No. 36116 England

26th August 1992

To Whom it may concern

Please be advised that the following Company are the authorised Sales Representatives for the Machinery Division of the Hick Hargreaves & Company Limited in the Arab Republic of Egypt:-

EPECO
Environmental Projects & Engineering Co
295 Portsaiod Street
Sayada Zainab
Cairo
Egypt

Tel: 390 6246
Fax: 391 0865

FOR HICK HARGREAVES & COMPANY LIMITED

AUTHORISED SIGNATORY

A ENGLAND
Export Sales Manager
Machinery Division

2006

MEMBER

Water Quality ASSOCIATION

2007

Certificate of Membership

EPECO

HAVING CLEARLY EVIDENCED SINCERE INTEREST
IN THE PROGRESS AND THE DEVELOPMENT OF WATER
QUALITY FOR ALL MANKIND YOU ARE HEREBY
ELECTED TO MEMBERSHIP WITH FULL PRIVILEGES IN

WATER QUALITY ASSOCIATION

Peter J Censky

PETER J. CENSKY
EXECUTIVE DIRECTOR

U.S. FILTER
UNITED STATES FILTER CORPORATION

12442 EAST PUTNAM STREET
WHITTIER, CA 90602
TEL: 310-698-9414
FAX: 310-698-1960

October 15, 1992

TELEFAX 966-1-478-7159

EPECO
P.O. Box 16259
Riyadh 11464, Saudi Arabia
Attn: Mr. Magdi El Beheiri

To Whom It May Concern:

This letter will advise those interested that we have appointed EPECO (at the above address) as our licensee for Egypt, Saudi Arabia, Kuwait and other Gulf States.

This agreement allows EPECO to act as our sole representative for this area with the exception of several projects that are underway between U. S. Filter and customers in Saudi Arabia.

A licensee for U. S. Filter is approved to sell and manufacture our equipment.

As soon as we complete the technical problems that exist with our license agreement we will send you a copy for your approval.

Sincerely,

U. S. FILTER/WHITTIER, INC.

H. N. Haberstroh
Vice President, Sales
HNH:ns

MECO®
MECHANICAL EQUIPMENT COMPANY INC.
861 CARONDELET STREET • NEW ORLEANS, LOUISIANA 70130, U.S.A.
PHONE 504 / 523-7271 • TELEX: 460165 • FAX: 525-4846

May 1, 1991

Environmental Projects & Engineering Co.
(EPECO)
P.O. Box 16529
Riyadh, 11464
Saudi Arabia

Dear Mr. Magdi:

It is the intention of MECO to appoint Magdi ElBeheiri/EPECO as our exclusive agent covering MECO Seawater and Brackish Water Conversion Equipment for the territory of Egypt and Area Manager for the territories of Saudi Arabia, Kuwait, Iraq, Bahrain, Oman, Sudan & Yemen to be handled through local distributors appointed by EPECO and approved by MECO.

The formal agreement will be drafted and sent by May 6, 1991. You will send a draft of the Distributor Agreement.

We appreciate your business and look forward to our future business relationship.

Best regards,

Wil F. Pergande
Vice President - Marketing

WFP:mmb

LICON

October 21, 1992

Environmental Projects & Engineering Co.
P.O. box 16259
Riyadh, Saudi Arabia 11464

Att: Mr. Magdi El Beheiri Re: Licon Representation

Subject: Initial Agreement

Dear Mr. El Beheiri,

We are pleased to inform you that EPECO is the exclusive agent of LICON, INC. in the territory of The Kingdom of Saudi Arabia, Egypt and Kuwait.

The products represented are Licon's complete line of liquid processing equipment used for industrial waste water concentration and fresh water production.

This letter agreement will be in effect until our formal registered Agreement is finalized and completed.

We wish you success in the representation of LICON, INC. and its family of products for the Industrial, Offshore, and Marine industries.

Best regards,

Wil F. Pergande
President/CEO

WP/kt

ref/wil92.153

200 EAST GOVERNMENT STREET • SUITE 130 • PENSACOLA, FL 32501 • (TEL) 904/434-5088 • (FAX) 904/438-2040

WATERLINE

TO WHOM IT MAY CONCERN

We hereby certify that the company EPECO Environmental Projects & Engineering Co., Riyadh, has been appointed as our exclusive distributor with contract dated October 15, 1992 for the following Countries:

- Saudi Arabia (excluding Water and Sewage Authority of Jeddah)
- United Arab Emirates
- Kuwait
- Egypt
- Bahrain
- Sultanate of Oman
- Yemen

International aid and relief organisations in any of the above countries are excluded from the exclusive distributorship agreement. The validity of said agreement is limited to December 31, 1993 with a mutual option to renew.

WATER-LINE S.A.
MEZZOVICO-LUGANO / SWITZERLAND

Nicola A. Jeker
Marketing & Sales

Romano Colla
Director

Date: 21/3/2006

Memorandum of Understanding

Mr. Sergio Dani, the commercial manaer of ItalProgetti Engineering S.p.A , based in Lungamo Pacinoto, 59/a 56020 San Romano (PI), Itally and Mr. Magdi el Beheiri, the director general of the Environmental Projects & Engineering Co. Ltd.-EPECO, based in 10, tayaran Str., Raba el Adawia, Nasr City, Cairo 11371, Egypt, has agreed to form a joint venture business to achieve the following:

(1)To execute the Italprogetti projects locally in Egypt and other middle east countries. Projects will be discussed and executed on a case by case bases between Italprogetti+EPECO joint venture and Italprogetti.
(2)To promote Italprogetti original business in the same geographical area as above.
(3)To promote new businesses-worldwide- through Italprogetti+EPECO such as reverse osmosis desalination, membrane bio-reactors, compact domestic wastewater treatment and recycling, filtration systems, …etc. It's obvious that Italprogetti+EPECO will benefit of it's "Italian" roots.

It's anticipated that Italprogetti+EPECO will be able to secure orders and finalize deals worth US$ 100 Million/year in new businesses as mentioned. This must be planned to take place within 5-7 years time.
A short note agreement might be finalized and legalized to allow the new Italprogetti+EPECO to start.

Mr. Sergio Dani,
commercial manaer
ItalProgetti Engineering S.p.A,
Lungamo Pacinoto, 59/a
56020 San Romano (PI), Itally

ITALPROGETTI ENGINEERING SPA
Via Lungarno Pacinotti, 59/A
56020 SAN ROMANO (PI)
Tel. 0571-450477 - 0571-450301
Partita IVA 00344980503

Magdi el Beheiri,
director general
Environmental Projects & Engineering Co. Ltd.-EPECO,
10, tayaran Str., Raba el Adawia, Nasr City,
Cairo 11371, Egypt

Magdi el Beheiri